## ENVIRONMENTAL MONITORING AND BASELINE DATA

Compiled under the
SMITHSONIAN INSTITUTION
ENVIRONMENTAL SCIENCES PROGRAM

Temperate Studies
Volume III

Rhode River, Maryland

Edited by David L. Correll



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Surface and Bottom Water Stations (maps 2 and 4)

Dissolved Oxygen (mg O<sub>2</sub>/liter)

Turbidity (Jackson Units)

Alkalinity (mg Ca CO<sub>3</sub>/liter)

<u>Dissolved Oxygen</u> - Samples were fixed in the field and titrated in the laboratory using the azide modification of the Winkler method (American Public Health Association, 1971. "Standard Methods for the Examination of Water and Waste Water". 13th Ed. APHA, New York).

<u>Turbidity</u> - Measured in the field with a Hach, Model 2100A, turbidimeter operated from a 12 volt lead storage battery by means of a solid state power inverter.

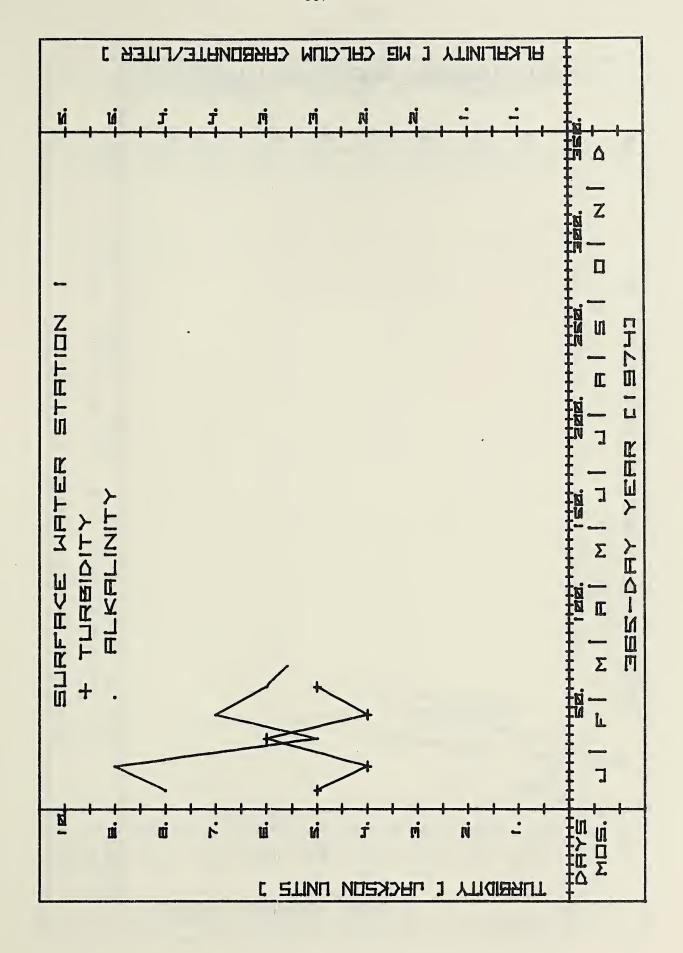
Alkalinity - Measured by acid titration to a phenolphtalein end point for carbonate and a biomcresol green-methyl red end point for bicarbonate (American Public Health Association, 1971. 13th Ed. APHA, New York).

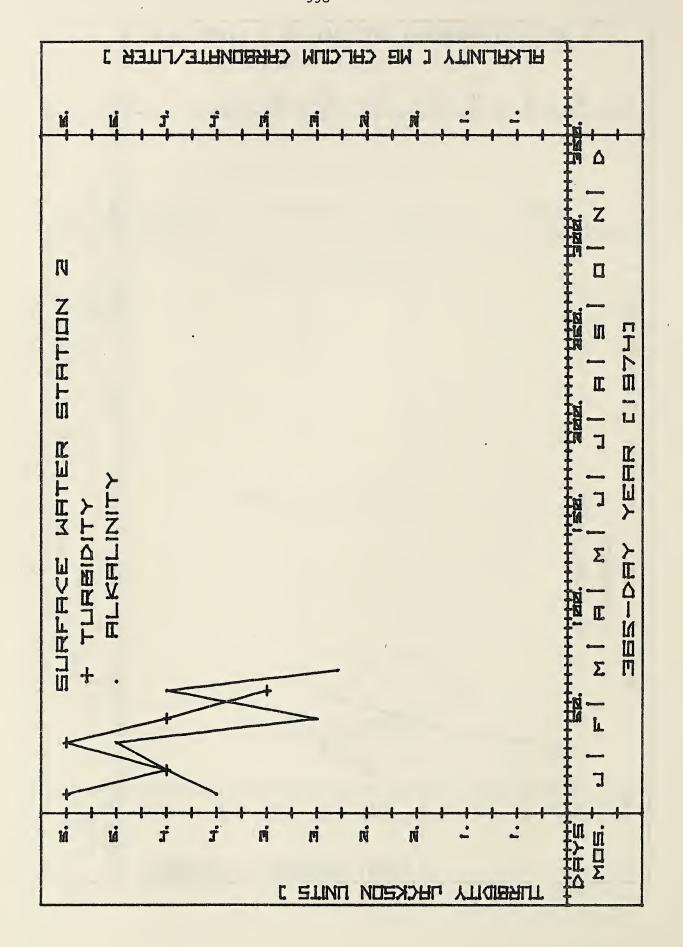
Principal Investigator: David L. Correll, Radiation Biology Laboratory, Smithsonian Institution.

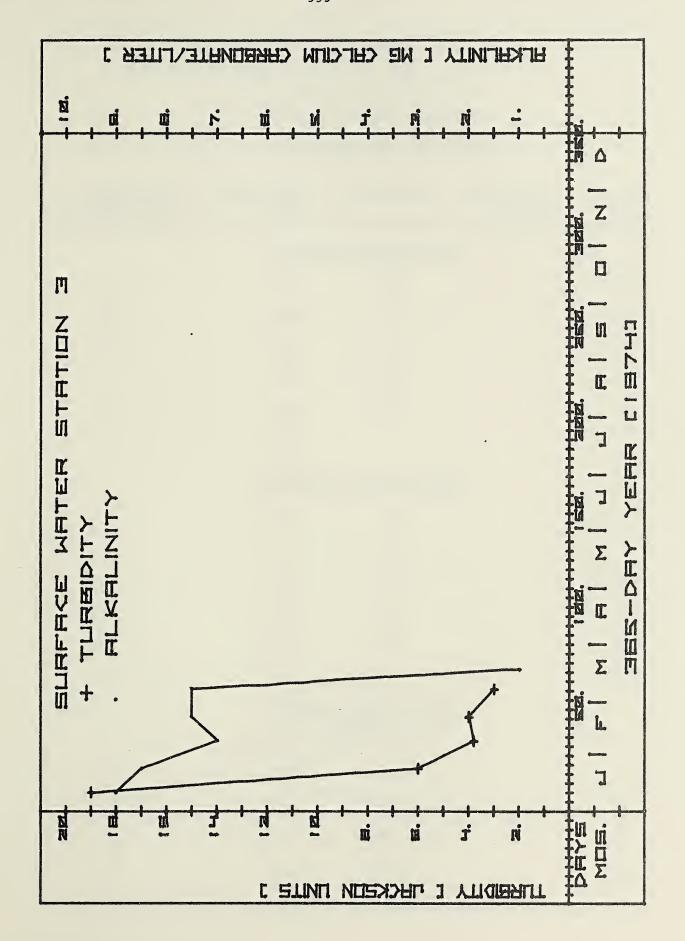
Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution's Environmental Sciences Program.

Surface Water Stations (map 2)
Dissolved Oxygen (mg O2/liter)
Turbidity (Jackson Units)
Alkalinity (mg CaCO3/liter)

Day of 1974	Dissolved Oxygen	Turbidity	Alkalinity Total	Alkalinity Phenolphthalein
		Surface Water St	ation 1	
10	-	5.0	4.0	0
23		4.0	4.5	0
38	<b>-</b> '	6.0	2.5	0
51	-	4.0	3.5	. 0
66	-	5.0	3.0	0
77	-	-	2.8	0
		Surface Water St	ation 2	
10	-	5.0	3.5	. 0
23	-	4.0	4.0	0
38	<b>∞</b> .	5.0	4.5	0
51	-	4.0	2.5	0
66	-	3.0	4.0	0
77	-	-	2.3	0
		Surface Water St	ation 3	
10	-	19	9.0	0
23	-	6.0	8.5	0
38	-	3.8	7.0	0
51	-	4.0	7.5	0
66	-	3.0	7.5	0
77	-	-	<b>&lt;</b> 1	0







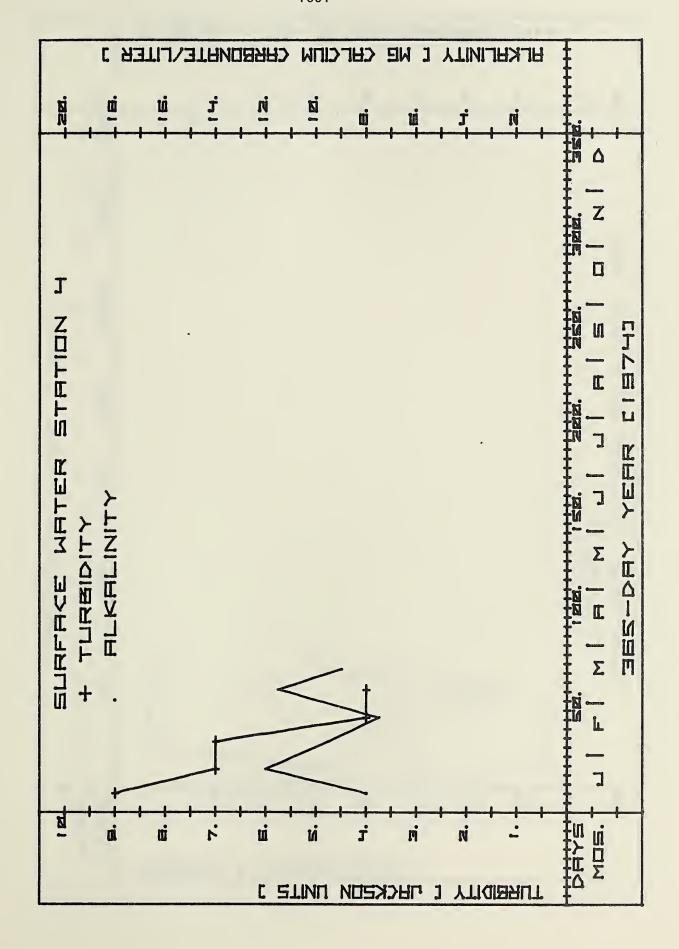
Surface Stations (Cont'd)

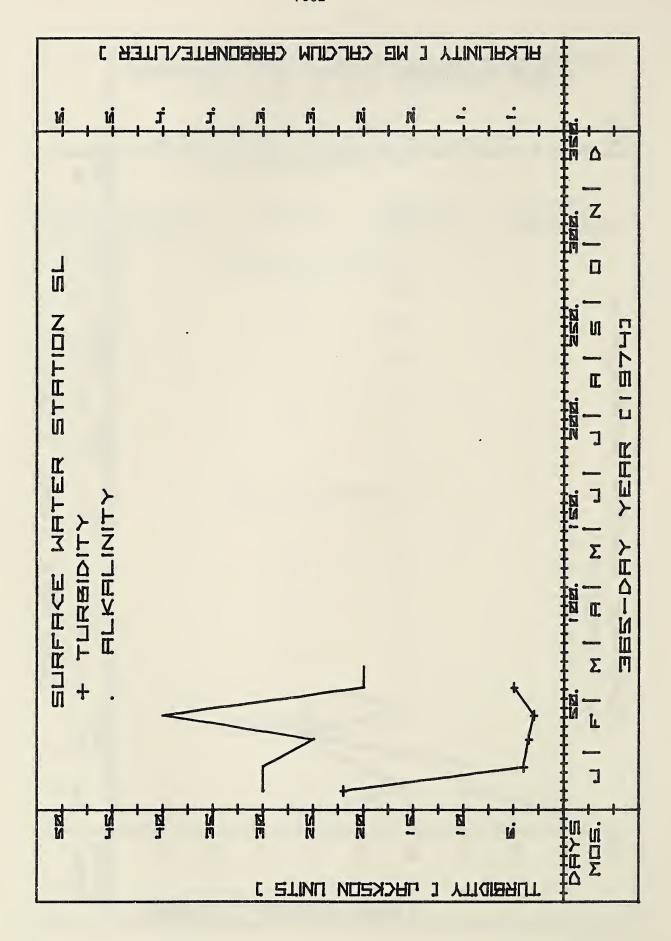
Dissolved Oxygen (mg O<sub>2</sub>/liter)

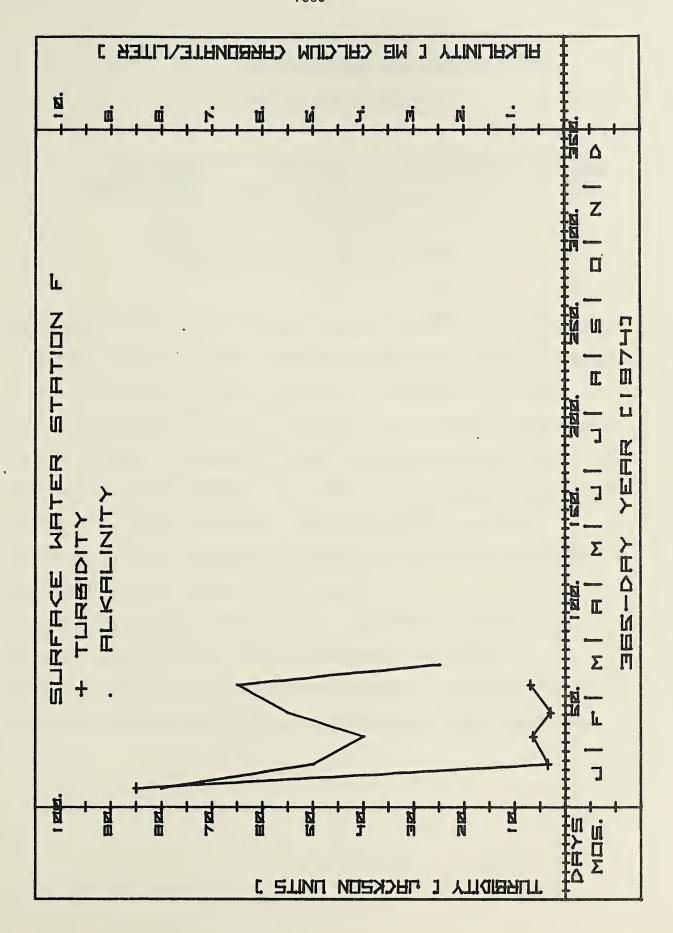
Turbidity (Jackson Units)

Alkalinity (mg CaCO<sub>3</sub>/liter)

Day of 1974	Dissolved Oxygen	Turbidity	Alkalinity Total	Alkalinity Phenolphthalein
		Surface Water St	ation 4	
10	-	9.0	8.0	0
23		7.0	12.0	0
38		7.0	9.5	0
51	-	4.0	7.5	0
66	-	4.0	11.5	0
77	-	-	9.0	0
		Surface Water St	ation SL	
10	-	22	3.0	0
23	-	4.0	3.0	0
38		3.5	2.5	0
51	-	3.0	4.0	0
66	-	5.0	2.0	0
77	-	-	2.0	0
		Surface Water St	ation F	
10	-	85	8.0	0
23	-	3.5	5.0	0
38	-	6.5	4.0	0
51	-	3.0	5.5	0
66	-	7.0	6.5	0
77	-	-	2.5	0







Groundwater - spring
Turbidity (Jackson Units)
Alkalinity (mg CaCO<sub>3</sub>/liter)

Day of 1974	Turbidity	Alkalinity Total	Alkalinity Phenolphthalein
23	11	5.0	0
38	6.5	-	0
51	7.0	4.5	0
66	2.0	_	0

Suspended Particles in Volume-Integrated Watershed Runoff Samples

Total Particulates (mg/liter)

Mineral Particulates (mg/liter)

Organic Particulates (mg/liter)

Mineral Particulate Discharge Rate (Kg/watershed/time interval)

Organic Particulate Discharge Rate (Kg/watershed/time interval)

<u>Techniques</u> - The water was filtered through 47 mm diam., 0.45 pore size, pretreated membrane filters. Gravimetric methods were used for concentrations of total solids (Banse, K; Falls, C. P.; Hobson, L. A. (1963).

Deep Sea Research 10; 639-642). Oxidizable organic matter was determined by loss of weight upon oxidation with 30% hydrogen peroxide (Pierce, J. W.; Nelson, D. D.; and Colquhoun, D. J. (1972). In <u>Shelf Sediment Transport</u>, Ed. by Swift, Duane, and Pilkey. Dowden, Hutchinson, and Ross; Straoudsburg, Pa. pp. 281-306). Mineralogy was determined as described under soils analysis section of this report.

<u>Principal Investigator</u>: Jack W. Pierce, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution.

Research Funding: Smithsonian Research Foundation and the Program for Research Applied to National Needs of the National Science Foundation.

Data for North Branch of Muddy Creek Weir (Station 1)

		Suspended Particulate Matter			
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)	
3-10	1.77 <sup>a</sup>	22.5 <sup>c</sup>	19.7 <sup>C</sup>	2.8 <sup>c</sup>	
10-17	0.71 <sup>a</sup>	22.5	19.7	2.8	
17-24	1.3	24.8	13.4	1.4	
24-31	1.6	36.1	32.2	3.9	
31-38	1.1.	16.4	11.7	4.7	
38-45	1.2	26.8	25.6	1.2	
52-59	0.79	28.7	27.9	0.8	
59-66	0.76	27.8	22.9	4.9	
66-73	0.74	43.7	38.6	5.1	
73-84	3.98	24.9	67.0	7.9	
84-91	4.65	16.5	14.3	2.2	
91-98	2.98	20.6	16.5	4.1	
98-105	4.44	39.1	33.5	5.6	
105-112	1.65	29.7	25.3	4.4	
112-119	1.32	17.4	14.3	3.1	
119-126	1.08	24.2	14.3	9.9	
126-133	1.18	26.4	14.8	11.6	
133-140	1.13	17.0	12.7	4.3	
140-148	0.51	40.3	32.9	7.4	
148-154	1.96	98.0	86.2	11.8	
154-161	1.11	44.8	40.5	4.3	

aData calculated partially from flow meter data.

 $<sup>^{\</sup>text{C}}$ Concentrations estimated by interpolation.

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Data for North Branch of Muddy Creek Weir (Station 1)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval)	Total Solids (mg/l)	Mineral (mq/l)	Organic (mg/1)
161-168	0.46	165.8	148.7	17.1
168-175	0.37	64.2	51.2	13.0
175-182	0.45	62.8	48.2	13.6
182-189	0.17	40.4	20.6	19.8
189-196	0.004	34.4	16.7	17.7
196-203	0.002d	34.4 <sup>c</sup>	16.7 <sup>c</sup>	17.7 <sup>c</sup>
203-210	0.000005 <sup>d</sup>	34.4 <sup>C</sup>	16.7 <sup>c</sup>	17.7 <sup>c</sup>
210-217	0.0007 <sup>d</sup>	34.4 <sup>c</sup>	16.7 <sup>c</sup>	17.7 <sup>c</sup>
217-224	0.002 <sup>d</sup>	34.4 <sup>c</sup>	16.7 <sup>C</sup>	17.7 <sup>C</sup>
224-231	0.0002 <sup>d</sup>	34.4 <sup>c</sup>	16.7 <sup>C</sup>	17.7 <sup>C</sup>
231-238	0.0002 <sup>d</sup>	34.4 <sup>C</sup>	16.7 <sup>C</sup>	17.7 <sup>C</sup>
238-245	0.000002 <sup>C</sup>	65.1 <sup>c</sup>	48.9 <sup>C</sup>	16.2 <sup>C</sup>
245-252	0.1	65.1	48.9	16.2
252-259	0.16	65.1 <sup>C</sup>	48.9 <sup>C</sup>	16.2 <sup>C</sup>
259-266	0.004 <sup>d</sup>	678.5 <sup>C</sup>	563.2 <sup>C</sup>	115.3 <sup>c</sup>
266-273	0.91	678.5	563.2	115.3
273-287		Stream D	ry	
287-294	0.27	44.8	38.5	6.3
294-302	0.06 <sup>d</sup>	44.8 <sup>C</sup>	38.5 <sup>C</sup>	6.3 <sup>c</sup>
302-308	0.03	44.8C	38.5 <sup>C</sup>	6.3 <sup>c</sup>
308-315	0.06	44.8 <sup>C</sup>	38.5 <sup>C</sup>	6.3 <sup>C</sup>

dIntermittent flow during this time period.

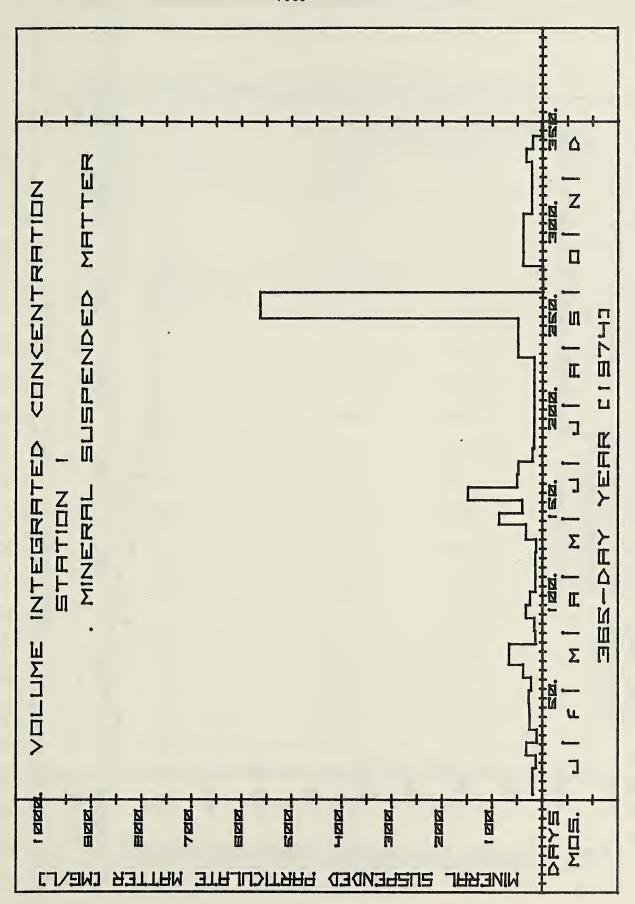
 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.

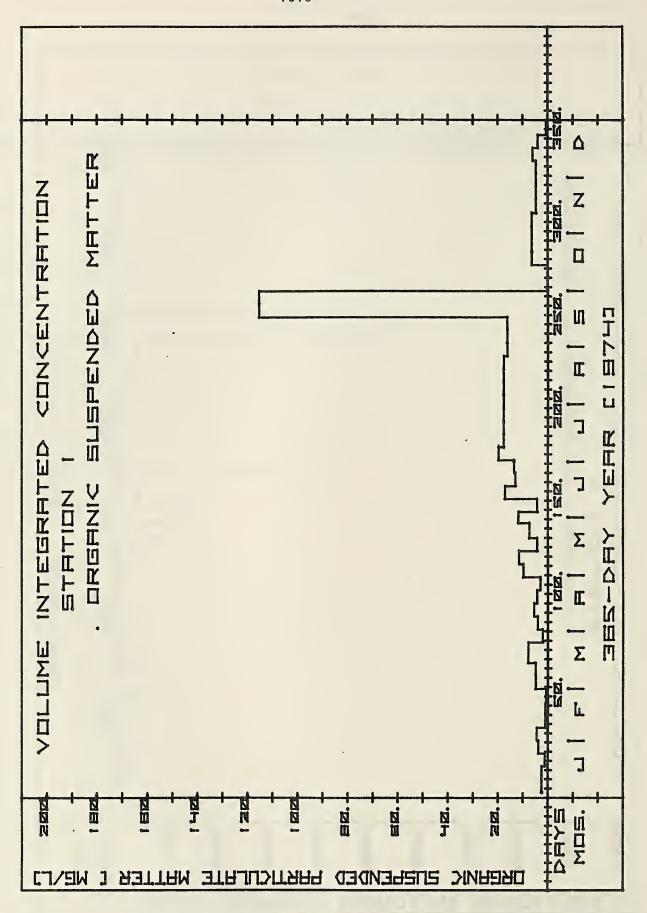
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Data for North Branch of Muddy Creek Weir (Station 1)

		Suspe	ended Particulat	e Matter
Days of 1974	Water Discharge (liters X 10'/interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
315-322	0.1	26.8 <sup>c</sup>	22.1 <sup>C</sup>	4.7 <sup>C</sup>
322-329	0.1	26.8 <sup>c</sup>	22.1 <sup>c</sup>	4.7 <sup>C</sup>
329-336	0.32	26.8 <sup>c</sup>	22.1 <sup>c</sup>	4.7 <sup>C</sup>
336-343	0.89	26.8	22.1	4.7
343-350	0.73	36.8	32.8	6.0
350-357	1.38	23.9	20.0	3.9
357-364	0.49	2.7	2.1	0.6
364-365	0.06	2.7 <sup>C</sup>	2,.1 <sup>c</sup>	0.6 <sup>C</sup>

 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.





Data for Blue Jay Branch of Muddy Creek Weir (Station 2)

		Suspended Particulate Matter			
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)	
3-10	1.7 <sup>b</sup>	18.9 <sup>C</sup>	16.2 <sup>C</sup>	2.7 <sup>c</sup>	
10-17	0.58 <sup>b</sup>	18.9 <sup>c</sup>	16.2 <sup>c</sup>	2.7 <sup>c</sup>	
17-24	0.89 <sup>a</sup>	18.9	16.2	2.7	
24-31	1.5 <sup>a</sup>	21.1	17.8	3.3	
31-38	1 .	15.6	11.3	4.3	
38-45	1	24.2	20.5	3.7	
45-52	0.89	24.2 <sup>C</sup>	20.5 <sup>C</sup>	3.7 <sup>c</sup>	
52-66	0.7	27.4	24:6	2.8	
66-73	0.6	25.2	22.2	3.0	
73-84	3.6 <sup>a</sup>	111.2	98.4	12.8	
84-91	4.6	29.5	26.0	3.5	
91-98	2.4	8.2	7.1	1.1	
98-105	4	11	7.7	2.3	
105-112	1.3	14	11.9	2.1	
112-119	1	4.2	3	1.2	
119-126	1.2	17.8	11.2	6.6	
126-133	0.98	9.4	6.5	2.9	
133-140	0.55	6.4	4.9	1.5	
140-148	0.33	31.2	28	3.2	

aData calculated partially from flow meter data.

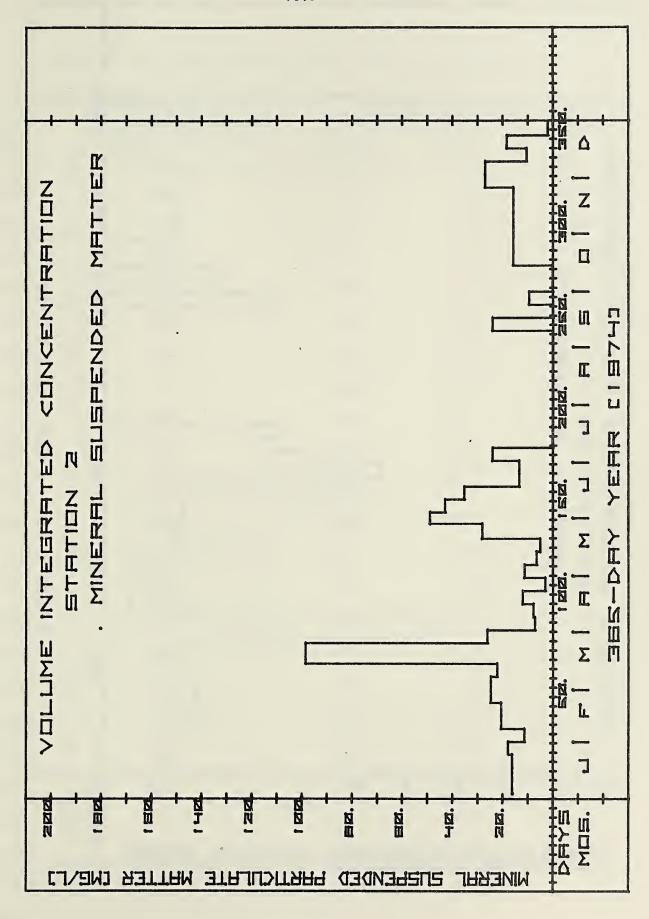
bFlow was estimated by correlation of flow at weir 1.

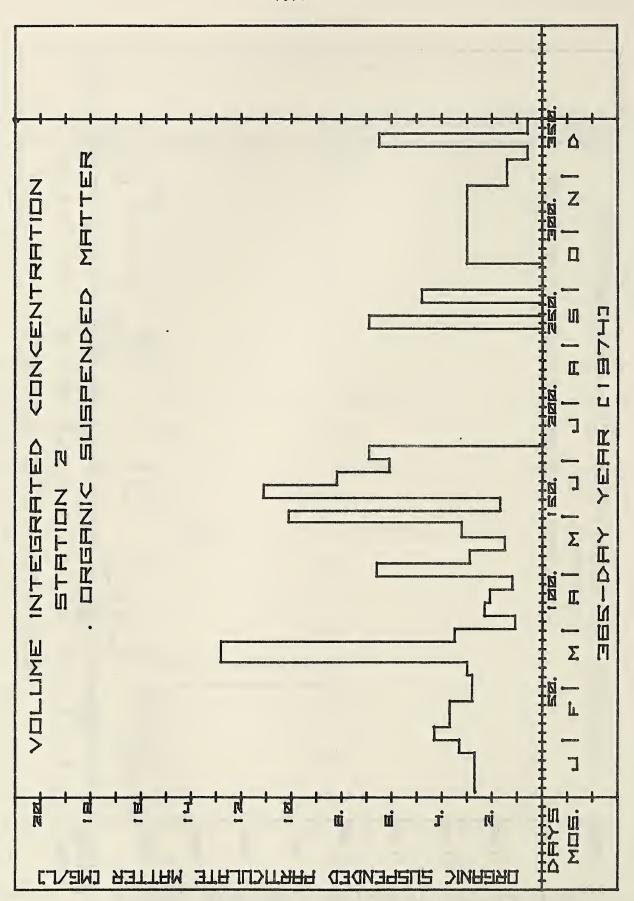
<sup>&</sup>lt;sup>C</sup>Concentrations estimated by interpolation.

Data for Blue Jay Branch of Muddy Creek Weir (Station 2)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 /interval	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
148-154	1.9	48.9	48.8	10.1
154-161	0.85	44.6	42.9	1.7
161-168	0.19	46.2	35.1	11.1
168-175	0.26	21.6	13.4	8.2
175-182	0.38	19.4	13.3	6.1
182-189	0.05	30.9	24	6.9
189-252		Stream	Dry	
252-259	0.0002	30.9 <sup>c</sup>	24 <sup>C</sup>	6,9 <sup>C</sup>
259-266		Stream	Dry	
266-273	0.01	14.2	9.4	4.8
273-287		Stream	Dry	
287-294	0.11	18.7	15.7	3.0
294-302	0.01	18.7 <sup>c</sup>	15.7 <sup>c</sup>	3.0 <sup>c</sup>
302-308	0.01	18.7 <sup>c</sup>	15.7 <sup>c</sup>	3.0 <sup>c</sup>
308-315	0.02	18.7 <sup>c</sup>	15.7 <sup>C</sup>	3.0 <sup>c</sup>
315-322	0.06	18.7 <sup>c</sup>	15.7 <sup>C</sup>	3.0 <sup>c</sup>
322-329	0.05	18.7 <sup>c</sup>	15.7 <sup>c</sup>	3.0 <sup>c</sup>
329-336	0.38	38.3 <sup>C</sup>	26.9 <sup>c</sup>	1.4 <sup>c</sup>
336-343	0.83	28.3	26.9	1.4
343-350	0.71	11.5	10.5	0.6
350-357	1.18	24.8	18.3	6.5
357-364	0.52	2.6	2.0	0.6
364-365	0.05	2.6 <sup>C</sup>	2.0 <sup>c</sup>	0.6 <sup>c</sup>

 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.





Data for Williamson Branch of Muddy Creek Weir (Station 3)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
3-10	0.64 <sup>a</sup>	8.4 <sup>c</sup>	7.5 <sup>c</sup>	0.9 <sup>c</sup>
10-17	2.29 <sup>a</sup>	8.4	7.5	0.9
17-24	1.29 <sup>a</sup>	20	17.4	2.6
24-31	1.85 <sup>a</sup>	24.1	23.4	0.7
31-38	1.38 <sup>a</sup>	10.7	8.9	1.8
38-45	1.41	21.7	17.1	4.6
45-52	1.1	20.4 <sup>c</sup>	17 <sup>C</sup>	3.4 <sup>c</sup>
52-59	1.07	19.2	17	2.2
59-66	0.99	24.2	21.6	2.6
66-73	0.96	26.6	23.8	2.8
73-84	4.38 <sup>b</sup>	118.2	106.7	11.5
84-91	5.12 <sup>b</sup>	62 <sup>C</sup>	55.6 <sup>C</sup>	6.4 <sup>C</sup>
91-98	3.28 <sup>b</sup>	5.9	4.5	1.4
98-105	4.88 <sup>b</sup>	78.4	69.1	9.3
105-112	1.82 <sup>b</sup>	13.4	12.2	1.2
112-119	1.45 <sup>D</sup>	7.2	4.1	3.1
119-126	1.06 <sup>a</sup>	17.1	10.6	6.5
126-133	1.35	36.6	32.8	3.8
133-140	0.57	10.2	5.7	4.5
140-148	0.4	43.1	34.2	8.9
148-154	2.1	117.3	105.9	11.4

<sup>&</sup>lt;sup>a</sup>Data calculated partially from flow meter data

<sup>&</sup>lt;sup>b</sup>Flow was estimated by correlation of flow at weir 1.

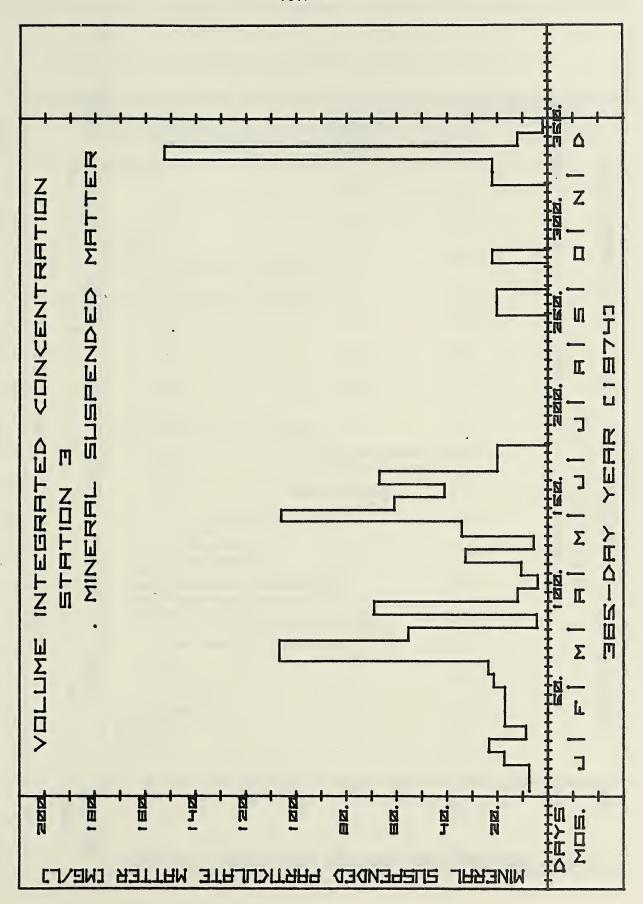
<sup>&</sup>lt;sup>C</sup>Concentrations estimated by interpolation.

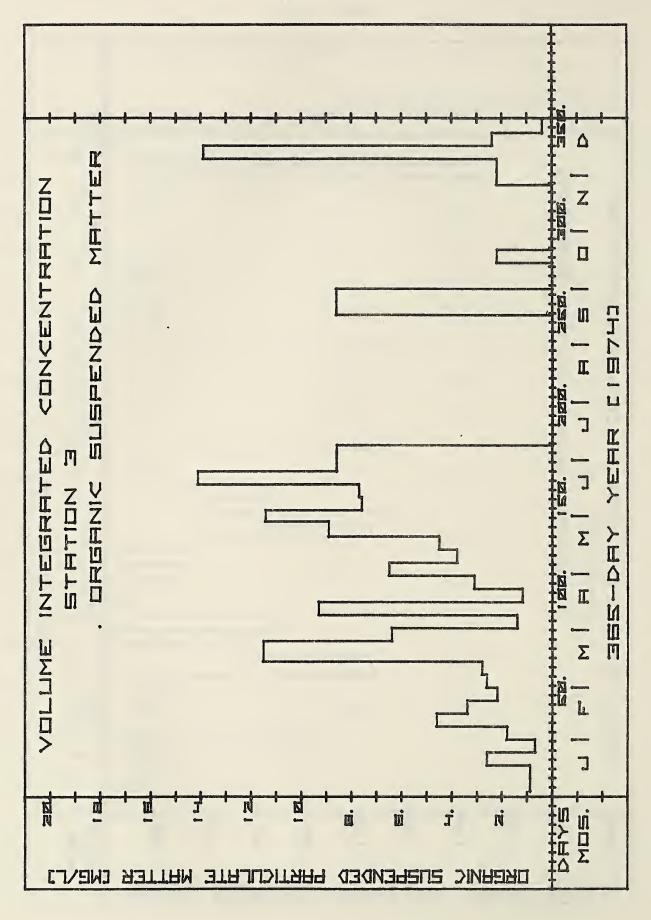
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Data for Williamson Branch of Muddy Creek Weir (Station 3)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
154-161	0.63	68.8	61.2	7.6
161-168	0.17	48.9	41.2	7.7
168-175	0.28	81.0	66.9	14.1
175-182	0.46	28.9	20.3	8.6
182-189	0.05	28.9 <sup>c</sup>	20.3 <sup>C</sup>	8.6 <sup>c</sup>
189-259		Stream Dr	у	
259-266	0.001	28.9 <sup>C</sup>	20.3 <sup>c</sup>	8.6 <sup>C</sup>
266-273	0.02	28.9 <sup>C</sup>	20.3 <sup>c</sup>	8.6 <sup>C</sup>
273-287		Stream Dr	·y	
287-294	0.01	24.3 <sup>c</sup>	22.1 <sup>c</sup>	2.2 <sup>C</sup>
294-329		Stream Dr	`y	
329-336	0.42	24.3 <sup>c</sup>	22.1 <sup>c</sup>	2.2 <sup>c</sup>
336-343	0.48	24.3	22.1	2.2
343-350	0.49	166.4	152.5	13.9
350-357	0.73	14.5	12.1	2.4
357-364	0.28	2.4	2.0	0.4
364-365	0.03	2.4 <sup>c</sup>	2.0 <sup>C</sup>	0.4 <sup>C</sup>

 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.





Data for Steinlein Branch of Muddy Creek Weir (Station SL)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
3-10	1.1	25.5 <sup>C</sup>	23 <sup>c</sup>	2.5 <sup>c</sup>
10-17	1.7 <sup>a</sup>	25.5	23	2.5
17-24	1 <sup>a</sup>	21.2	20.2	1
24-31	1.1	24.5	23.4	1.1
31-38	0.67	8.5	6.9	1.6
38-45	0.78	34.2	29	5.2
45-52	0.68	30.2 <sup>c</sup>	27.7 <sup>C</sup>	3.5 <sup>C</sup>
52-59	0.54	28.2	26.4	1.8
59-66	0.99	34.9	29.8	5.1
66-73	0.96	36.7	32.9	3.8
73-84	3.1	54	51.1	2.9
84-91	3.6	21	18.3	2.7
91-98	1.9	25	20	5
98-105	3.1	26.4	22.6	3.8
105-112	1.2	29.7	27	2.7
112-119	1	22	15.8	6.2
119-126	0.84	31.6	23.9	7.7
126-133	1.1	43.5	36.5	7
133-140	0.6	19.6	14.2	5.4
140-148	0.53	54.5	47.8	6.7
148-154	1.6	103	94	9

<sup>&</sup>lt;sup>a</sup>Data calculated partially from flow meter data.

 $<sup>^{\</sup>mathsf{C}}\mathsf{Concentrations}$  estimated by interpolation.

Data for Steinlein Branch of Muddy Creek Weir (Station SL)

		Suchan	Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>7</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)	
154-161	0.68	55.5	46.9	8.6	
161-168	0.24	62.6	56.7	5.9	
168-175	0.93	226.1	174.8	51.3	
175-182	0.58 <sup>a</sup>	48.6	32.7	15.9	
182-189	0.12	48.6 <sup>C</sup>	32.7 <sup>c</sup>	15.9 <sup>c</sup>	
189-196	0.01	48.6 <sup>C</sup>	32.7 <sup>c</sup>	15.9 <sup>C</sup>	
196-238		Stream Dr	y <b></b>		
238-246	0.004	48.6 <sup>C</sup>	32.7 <sup>C</sup>	15.9 <sup>C</sup>	
246-252	0.27	48.6 <sup>C</sup>	32.7 <sup>C</sup>	15.9 <sup>C</sup>	
252-259	0.22	48.6 <sup>C</sup>	32.7 <sup>C</sup>	15.9 <sup>C</sup>	
259-266		Stream Dr	y		
266-273	0.04	48.6 <sup>C</sup>	32.7 <sup>C</sup>	15.9 <sup>C</sup>	
273-287		Stream Dr	y		
287-294	0.01	48.6 <sup>C</sup>	32.7 <sup>c</sup>	15.9 <sup>c</sup>	
294-302		Stream Dr	y <b></b>		
302-308		Stream Dr	y		
308-315	0.01	47.5 <sup>C</sup>	44.2 <sup>C</sup>	3.3 <sup>c</sup>	
315-322	0.04	47.5 <sup>C</sup>	44.2 <sup>C</sup>	3.3 <sup>c</sup>	
322-329	0.03	47.5 <sup>C</sup>	44.2 <sup>C</sup>	3.3 <sup>c</sup>	
329-336	0.35	47.5 <sup>C</sup>	44.2 <sup>C</sup>	3.3 <sup>c</sup>	
336-343	0.65	47.5	44.2	3.3	
2					

<sup>&</sup>lt;sup>a</sup>Data calculated partially from flow meter data.

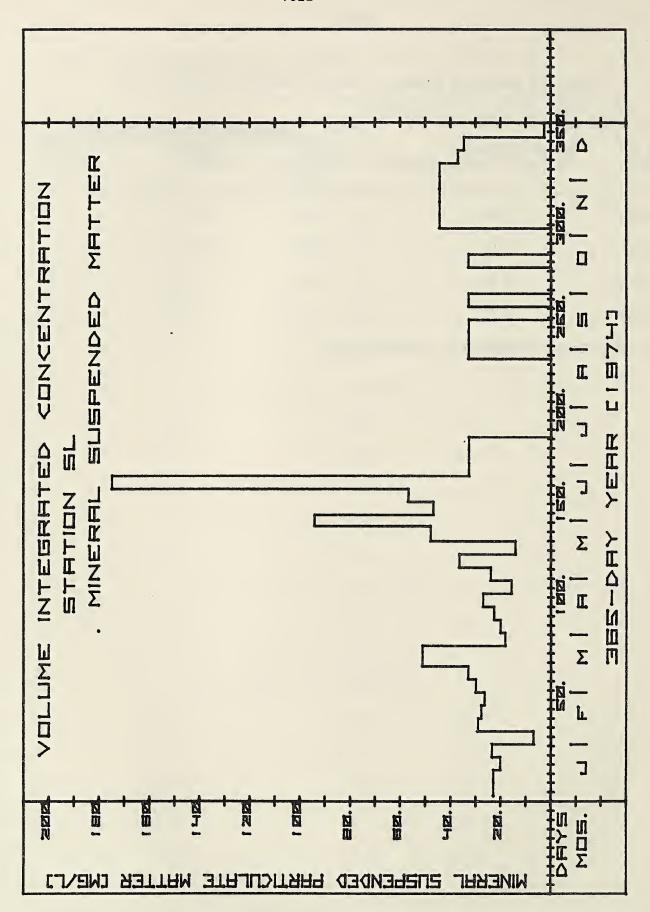
 $<sup>^{\</sup>text{C}}\text{Concentrations}$  estimated by interpolation.

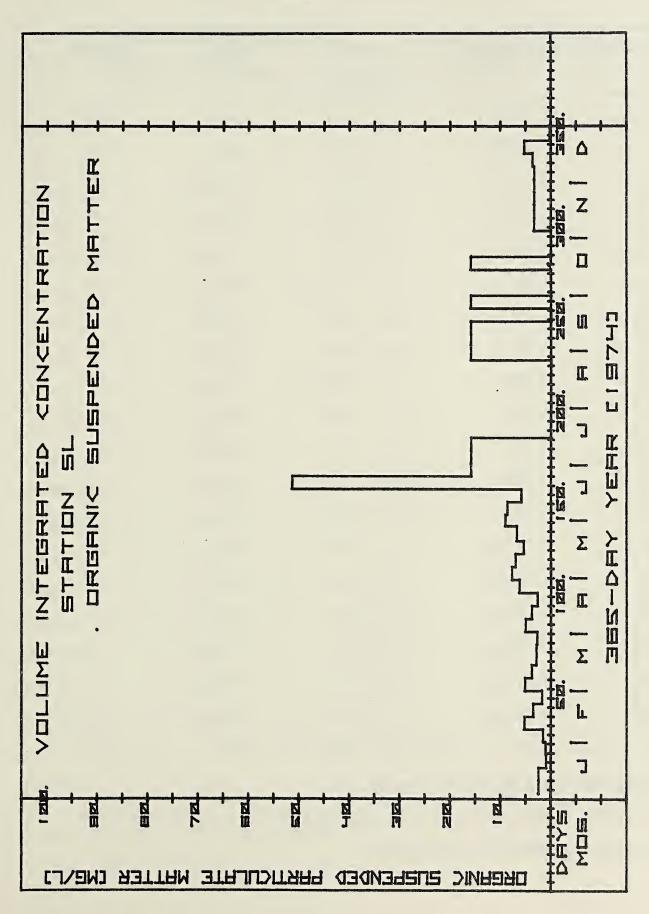
1021

Data for Steinlein Branch of Muddy Creek Weir (Station SL)

ACCOUNTS OF THE PARTY OF THE PA		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10'/interval)	Total Solids	Mineral (mg/l)	Organic (mg/l)
		(mg/l)		
343-350	0.73	40.8	37.1	3.7
350-357	0.87	39.8	34.6	5.2
357-364	0.26	3.0	2.7	0.3
364-365	0.03	3.0 <sup>c</sup>	2.7 <sup>c</sup>	0.1 <sup>c</sup>

<sup>&</sup>lt;sup>C</sup> Concentrations estimated by interpolation.





1024

Data for Fox Creek Weir (Station F)

		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>6</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/l)
3-10	0.598 <sup>a</sup>	63.1 <sup>C</sup>	54.1 <sup>c</sup>	9.0 <sup>c</sup>
10-17	1.42 <sup>a,b</sup>	63.1	54.1	9.0
17-24	0.45 <sup>a</sup>	71.3	63.2	8.1
24-31	1.58	30.9	29.7	1.2
31-38	1.05	15.2	9.2	6.0
38-45	1.05	27.9	20.9	7.0
45-52	1.17	25.3 <sup>c</sup>	21.1 <sup>c</sup>	4.2 <sup>C</sup>
52-59	1.35	22.8	21.4	1.4
59-66	0.795	29.4	26.6	2.8
66-73	0.712	35.2	32.8	2.4
73-84	3.57 <sup>b</sup>	47.4	42.5	4.9
84-91	3.22 <sup>b</sup>	9.0	6.8	2.2
91-98	3.13 <sup>b</sup>	27.6	23.3	4.3
98-105	2.72 <sup>b</sup>	57.2	50.1	7.1
105-112	1.51	15.5	14.4	1.1
112-119	1.13	32.4	21.7	10.7
119-126	0.951	18.2	15.9	2.3
126-133	1.04	7.6	6.0	1.6
133-140	0.626	13.3	10.9	2.4
140-148	0.46	32.8	27.3	5.5

<sup>&</sup>lt;sup>a</sup>Data calculated partially from flow meter data.

<sup>&</sup>lt;sup>b</sup>Flow was estimated by correlation of flow at weir 1.

 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.

1025

Data for Fox Creek Weir (Station F)

COLD LANGE AND ADDRESS OF THE PARTY OF THE P		Suspended Particulate Matter		
Days of 1974	Water Discharge (liters X 10 <sup>6</sup> /interval)	Total Solids (mg/l)	Mineral (mg/l)	Organic (mg/1)
148-154	1.32	137.4	123.8	13.6
154-161	0.71	37.2	32.2	4.9
161-168	0.348	35.6	33.1	2.5
168-175	0.374	43.4	35.1	8.3
175-182	0.54	60.7	49.5	11.2
182-189	0.18	9.0	6.4	2.6
189-196	0.075	9.0 <sup>C</sup>	6.4 <sup>c</sup>	2.6 <sup>c</sup>
196-203	0.32	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>C</sup>
203-210	0.019	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>C</sup>
210-218	0.007	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>c</sup>
218-224	0.007	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>C</sup>
224-232	0.0002	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>C</sup>
232-238	0.036	9.0 <sup>C</sup>	6.4 <sup>C</sup>	2.6 <sup>C</sup>
238-246	0.06	261.0 <sup>C</sup>	208.3 <sup>c</sup>	52.7 <sup>C</sup>
246-252	0.179	261.0	208.3	52.7
252-259	0.245	261.0 <sup>c</sup>	208.3 <sup>C</sup>	52.7 <sup>c</sup>
259-266	0.008	1116.5 <sup>C</sup>	1050.6 <sup>c</sup>	65.9 <sup>C</sup>
266-273	0.91	1116.5	1050.6	65.9
273-280	0.06	116.5 <sup>c</sup>	1050.6 <sup>C</sup>	65.9 <sup>c</sup>
280-287		Stream Di	^y	
287-294	0.156	162.7 <sup>c</sup>	144.4 <sup>C</sup>	18.3 <sup>C</sup>

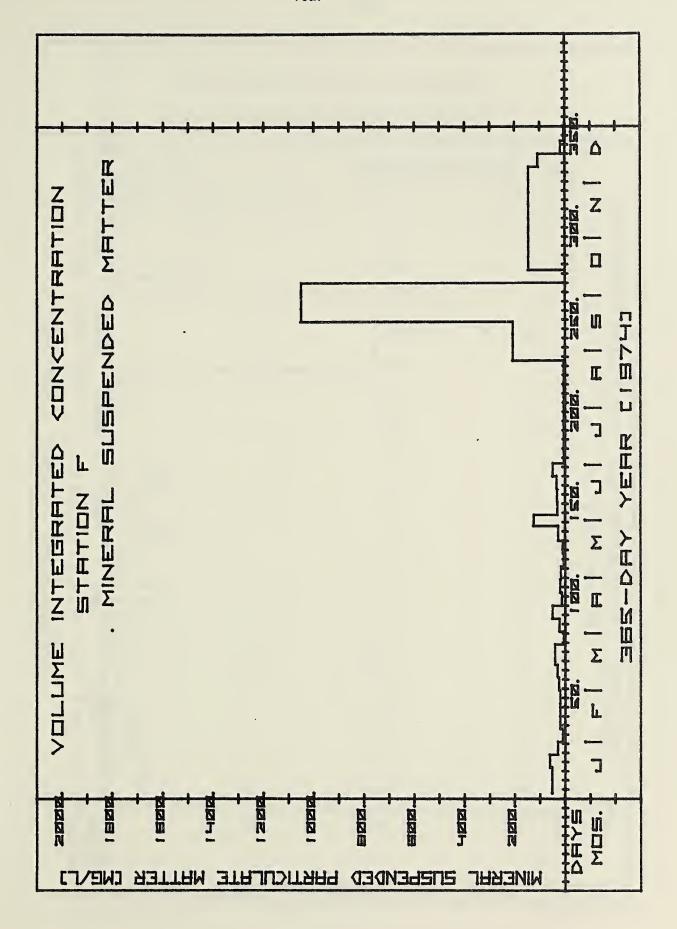
<sup>&</sup>lt;sup>C</sup>Concentrations estimated by interpolation.

1026

Data for Fox Creek Weir (Station F)

		Suspended Particulate Matter		
Days of	Water Discharge	Total	Mineral	Organic
1974	(liters X 10 <sup>6</sup> /interval)	Solids (mg/l)	(mg/1)	(mg/1)
		(11197-17		
294-302	0.35	162.7 <sup>C</sup>	144.4 <sup>C</sup>	18.3 <sup>c</sup>
302-308	0.024	162.7 <sup>C</sup>	144.4 <sup>C</sup>	18.3 <sup>C</sup>
308-315	0.057	162.7 <sup>C</sup>	144.4 <sup>C</sup>	18.3 <sup>C</sup>
315-322	0.081	162.7 <sup>C</sup>	144.4 <sup>C</sup>	18.3 <sup>C</sup>
322-329	0.066	162.7 <sup>C</sup>	144.4 <sup>C</sup>	18.3 <sup>c</sup>
329-336	0.286	162.7 <sup>c</sup>	144.4 <sup>C</sup>	18.3 <sup>c</sup>
336-343	0.68	162.7	144.4	18.3
343-350	0.481	124.7	108.5	16.2
350-357	1.039	20.6	17.7	2.9
357-364	0.319	4.3	4.0	0.3
364-365	0.037	4.3 <sup>C</sup>	4.0 <sup>C</sup>	0.3 <sup>c</sup>

 $<sup>^{\</sup>mathrm{C}}\mathrm{Concentrations}$  estimated by interpolation.



Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Par Mineral	ticulate (Kg) Organic
3-10	1	350c	50c
	2	280 <sup>c</sup>	46 <sup>c</sup>
	3	48 <sup>C</sup>	5.8 <sup>c</sup>
	SL	250 <sup>C</sup>	28 <sup>c</sup>
	F	32 <sup>c</sup>	5.4 <sup>c</sup>
10-17	1	140	20
	2	94°	, 16 <sup>c</sup>
	3	170	21
	SL	390	42
	F.	77	13
17-24	1	170	18
	2	140	24
	3	220	34
	SL	200	10
	F	28	3.6
24-31	1	520	62
	2	270	50
	3	430	13
	SL	260	12
	F	47	1.9

 $<sup>^{\</sup>mathrm{C}}$ Concentration estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Par Mineral	ticulate (Kg) Organic
31-38	1	130	52
	2	110	43
	3	120	25
	SL	46	11
	F	9.7	6.3
38-45	1	310	14
	2	200	37
	3	240	65
	SL	230	41
	F	22	7.4
45-52	1	280	13
	2	180	33
	3	190 <sup>c</sup>	37
	SL	190 <sup>C</sup>	24 <sup>C</sup>
	F	25 <sup>C</sup>	4.9 <sup>c</sup>
52-59	1	220	6.3
	2	130	15
	3	180	24
	SL	140	9.7
	F	29	1.9

 $<sup>^{\</sup>mathrm{C}}\mathrm{Concentration}$  estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year	Weir #	Suspended Par Mineral	rticulate (Kg) Organic
59-66	1	170	37
	2	170	20
	3	210	26
	SL	300	50
	F	21	2.2
66-73	1	290	38
	2	130	18
	3	230	27
	SL	320	36
	F	23	1.7
73-84	1	2700	310
	2	3500	460
	3	4700	500
	SL	1600	90
	F	150	17
84-91	1	660	100
	2	1200	160
	3	2800 <sup>c</sup>	330 <sup>c</sup>
	SL	660	97
	F	22	7.1

 $<sup>^{\</sup>mathrm{C}}$ Concentration estimated by interpolation.

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Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Part Mineral	ciculate (Kg) Organic
119-126	1	150	110
	2	130	79
	3	110	69
	SL	200	65
	F	15	2.2
126-133	1	170	140
	2	64	28
	3	440	51
	SL	400	77
	F	6.2	1.7
133-140	1	140	49
	2	27	8.2
	3	32	26
	SL	85	32
	F	6.8	1.5
140-148	1	170	38
	2	92	11
	3	140	36
	SL	250	36
	F	13	2.5

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

**************************************		Suspended F	Particulate (Kg)
Days of Year 1974	Weir #	Mineral	Organic
148-154	1	1700	230
	2	930	190
	3	2200	240
	SL	1500	140
	F	160	18
154-161	1	450	48
	2	360	14
	3	390	48
	SL	320	58
	F	23	3.5
161-168	1	680	79
	2	67	21
	3	70	13
	SL	140	14
	F	12	0.87
168-175	1	190	48
	2	35	21
	3	190	39
	SL	1600	480
	F	13	3.1

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Parti Mineral	organic
175-182	1	220	61
	2	51	23
	3	93	40
	SL	190	92
	F	27	6.0
182-189	1	35	34
	2	120	34
	3	10 <sup>c</sup>	4.3 <sup>C</sup>
	SL	39 <sup>c</sup>	19 <sup>C</sup>
	F	1.2	0.47
189-196	1	0.67	0.71
	2	0	0
	3	0	0
	SL.	2.0 <sup>c</sup>	1.0 <sup>c</sup>
	F	0.48 <sup>c</sup>	0.20 <sup>C</sup>
196-203	7	0.33 <sup>c</sup>	0.35 <sup>c</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	2.0 <sup>c</sup>	0.83 <sup>c</sup>

 $^{\text{C}}\textsc{Concentration}$  estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Particu Mineral	late (Kg) Organic
203-210	1	0.00084 <sup>C</sup>	0.00088 <sup>c</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	0.12 <sup>c</sup>	0.05 <sup>C</sup>
210-217	1	0.12 <sup>c</sup>	0.12 <sup>c</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	0.04 <sup>c</sup>	0.02 <sup>C</sup>
217-224	1	0.33 <sup>c</sup>	0.35 <sup>C</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	0.04 <sup>C</sup>	0.02 <sup>C</sup>
224-231	1	0.033 <sup>c</sup>	0.035 <sup>C</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	0.00096 <sup>C</sup>	0.00039 <sup>C</sup>

 $<sup>^{\</sup>mathrm{C}}$ Concentrations estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Par Mineral	rticulate (Kg) Organic
231-238	1	0.033 <sup>C</sup>	0.035 <sup>C</sup>
	2	0	0
	3	0	0
	SL	0	0
	F	0.23 <sup>c</sup>	0.094 <sup>C</sup>
238-245	1	0.00088 <sup>c</sup>	0.00029 <sup>C</sup>
-	2	0	0
	3	0	. 0
	SL	1.2 <sup>c</sup>	0.57 <sup>C</sup>
	F	12 <sup>C</sup>	3.1 <sup>c</sup>
245-252	1	49	16
	2	0	0
	3	0	0
	SL	88c	43 <sup>C</sup>
	F	37 <sup>C</sup>	9.4 <sup>c</sup>
252-259	1	78 <sup>C</sup>	26 <sup>C</sup>
	2	0.048 <sup>C</sup>	0.014 <sup>C</sup>
	3	0	0
	SL	72 <sup>C</sup>	35 <sup>C</sup>
	F	51 <sup>C</sup>	13 <sup>C</sup>

 $<sup>^{\</sup>mathrm{C}}$  Concentrations estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Part Mineral	iculate (Kg) Organic
259-266	1	23 <sup>c</sup>	4.6 <sup>C</sup>
	2	0	0
	3	0.20 <sup>c</sup>	0.086 <sup>0</sup>
	SL	0	0
	F	1.6 <sup>c</sup>	0.41 <sup>c</sup>
266-273	1	5100	1000
	2	0.94	. 0.48
	3	4.1 <sup>c</sup>	1.7 <sup>c</sup>
	SL	12 <sup>c</sup>	6.0 <sup>C</sup>
	F	960	60
273-280	1	0	0
	2	0	0
	3	0	0
	SL	0	0
	F	12 <sup>c</sup>	3.2 <sup>c</sup>
280-287	1	0	0
	2	0	0
	3	0	0
	SL	0	0
	F	0	0

 $^{\mathtt{C}}\mathsf{Concentrations}$  estimated by interpolation.

Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

Days of Year 1974	Weir #	Suspended Par Mineral	ticulate (Kg) Organic
287-294	1	100	17
	2	17	3.3
	3	2.2 <sup>c</sup>	0.22 <sup>c</sup>
•	SL	3.6 <sup>c</sup>	1.7 <sup>c</sup>
	F	23 <sup>c</sup>	2.9 <sup>c</sup>
294-302	1	23 <sup>c</sup>	2.8 <sup>c</sup>
	2	1.6 <sup>c</sup>	0.30 <sup>c</sup>
	3	0	0
	SL	0	0
	F	51 <sup>c</sup>	6.4 <sup>C</sup>
302-308	1	12 <sup>c</sup>	1.9 <sup>c</sup>
	2	1.6 <sup>C</sup>	0.30 <sup>C</sup>
	3	0	0
	SL	0	0
	F	3.5 <sup>C</sup>	0.44 <sup>C</sup>
308-315	1	23 <sup>C</sup>	3.8 <sup>c</sup>
	2	3.1 <sup>c</sup>	0.60 <sup>C</sup>
	3	0	0
	SL	6.2 <sup>C</sup>	0.46 <sup>c</sup>
	F	8.2 <sup>c</sup>	1.0 <sup>c</sup>

 $^{\mathtt{C}}\mathsf{Concentrations}$  estimated by interpolation.

Volume Integrated Total Discharge Data (amount dishcarge/watershed/time interval)

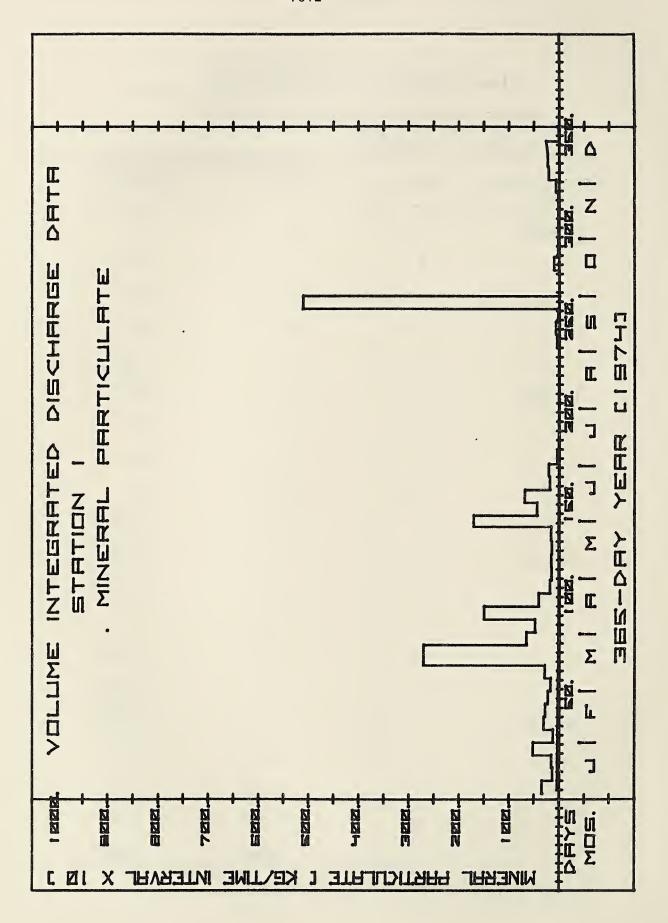
		Suspended Particulate (Kg)	
Days of Year 19 <b>74</b>	Weir #	Mineral	Organic
315-322	1	22 <sup>C</sup>	4.7 <sup>c</sup>
	2	9.4 <sup>c</sup>	1.8 <sup>c</sup>
	3	0	0
	SL	18 <sup>c</sup>	1.3 <sup>C</sup>
	F	12 <sup>C</sup>	1.5 <sup>C</sup>
322-329	1	22 <sup>c</sup>	4.7 <sup>C</sup>
	2	7.9 <sup>C</sup>	1.5 <sup>C</sup>
	3	0	. 0
	SL	13 <sup>C</sup>	0.99 <sup>C</sup>
	F	9.5 <sup>c</sup>	1.2 <sup>c</sup>
329-336	1	71 <sup>c</sup>	15 <sup>C</sup>
	2	100 <sup>c</sup>	5.3 <sup>c</sup>
	3	93 <sup>c</sup>	9.2 <sup>c</sup>
	SL	150 <sup>C</sup>	12 <sup>C</sup>
	F	41 <sup>C</sup>	5.2 <sup>C</sup>
336-343	1	200	42
	2	220	12
	3	110	1.1
	SL	290	21
	F	98	12

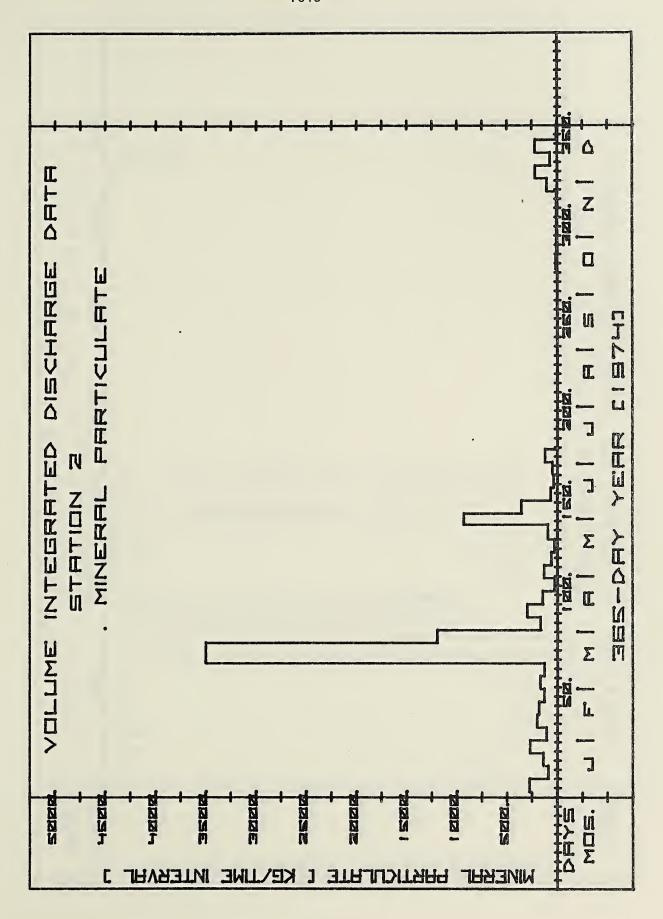
 $^{\mathtt{C}}\mathsf{Concentrations}$  estimated by interpolation.

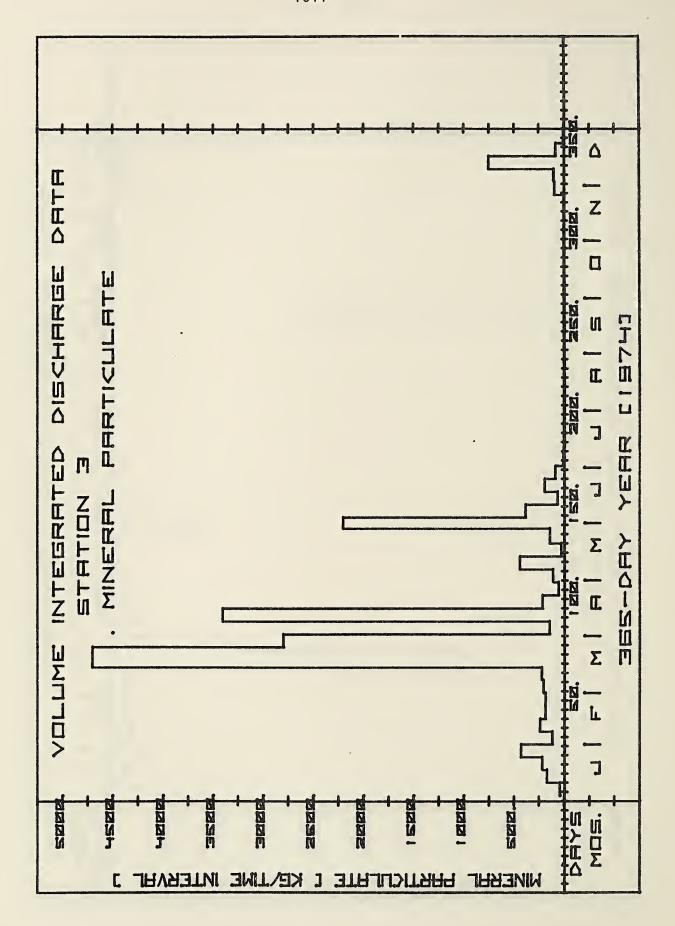
Volume Integrated Total Discharge Data (amount discharge/watershed/time interval)

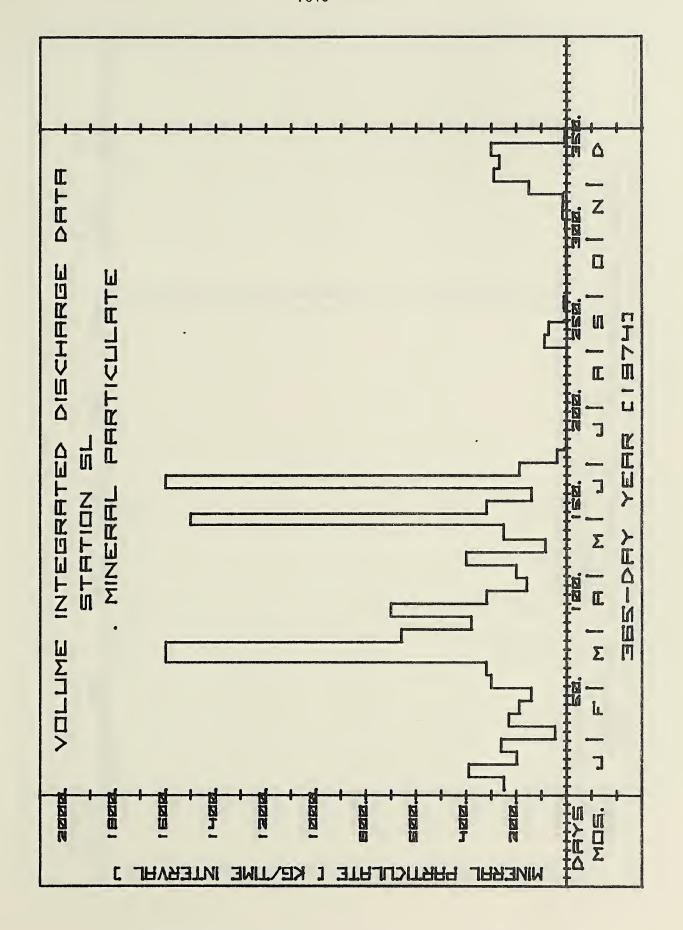
Days of Year 1974	Weir #	Suspended Part Mineral	organic
343-350	1	240	44
	2	75	4.3
	3	750	68
٠	SL	270	27
	F	52	7.8
350-357	Ĩ	280	54
	2	220	77
	3	88	18
	SL	300	45
	F	18	3.0
357-364	1	10	2.9
	2	10	3.1
	3	5.6	1.1
	SL	7.0	0.78
	F	1.3	0.096
364-365	1	1.3 <sup>c</sup>	0.36 <sup>c</sup>
	2	1.0 <sup>c</sup>	0.3 <sup>c</sup>
	3	0.60 <sup>C</sup>	0.12 <sup>c</sup>
	SL	0.81 <sup>c</sup>	0.090
	F	0.15 <sup>C</sup>	0.011 <sup>c</sup>

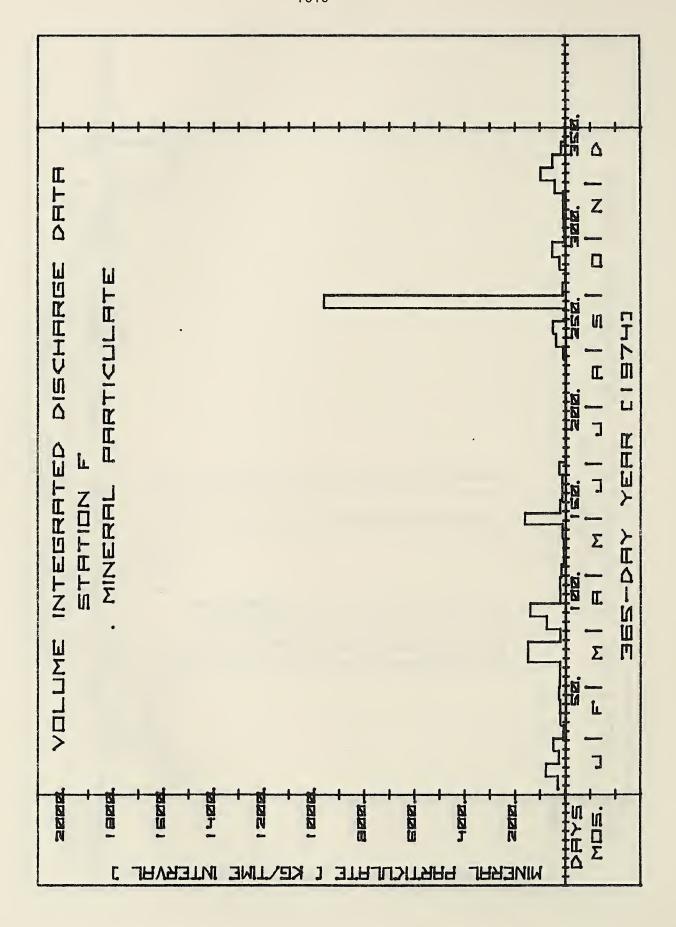
 $^{\mathrm{C}}$ Concentrations estimated by interpolation.

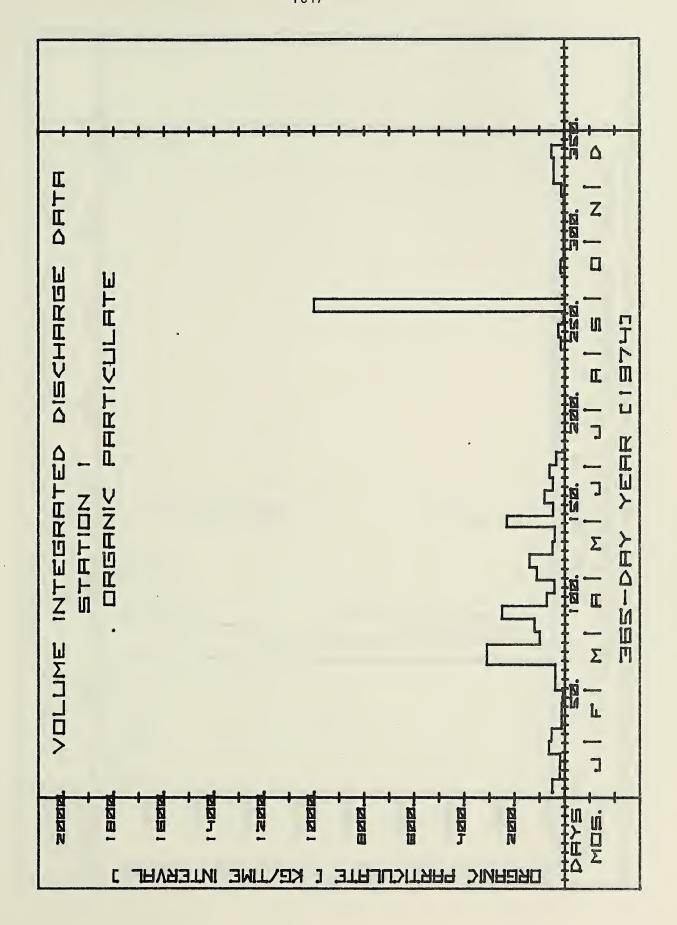


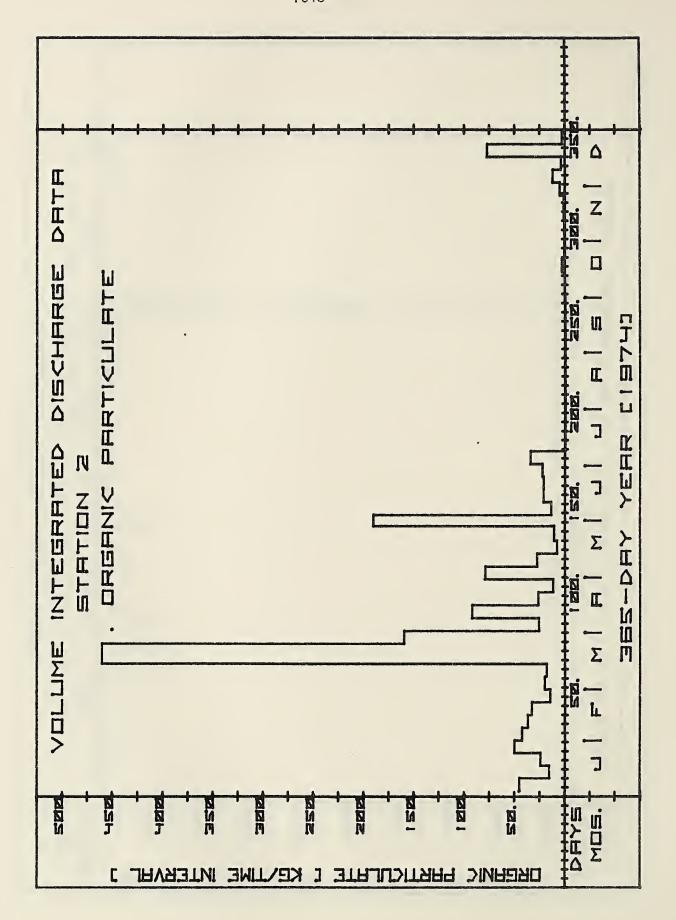


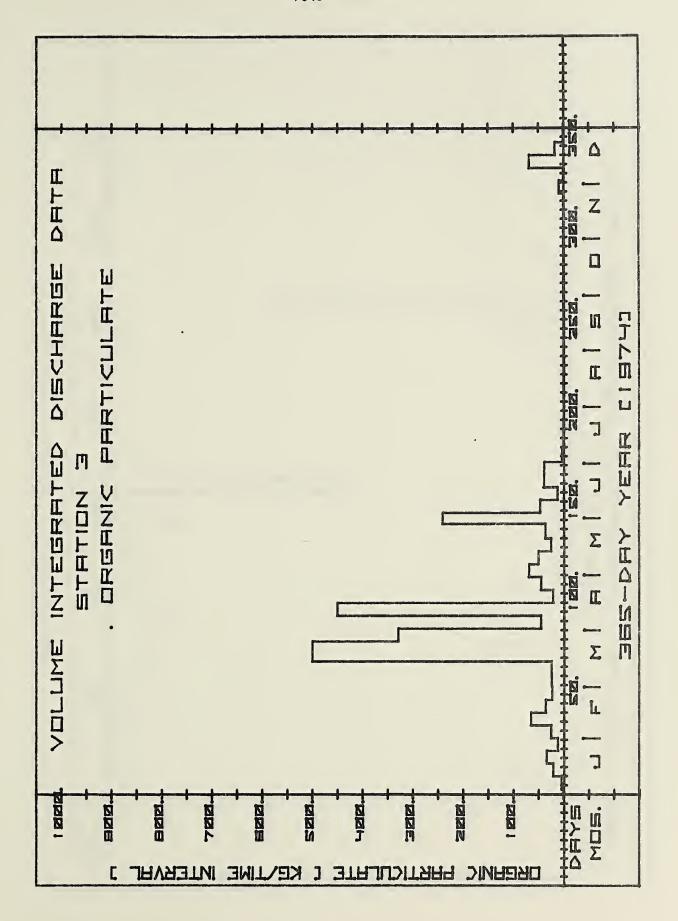


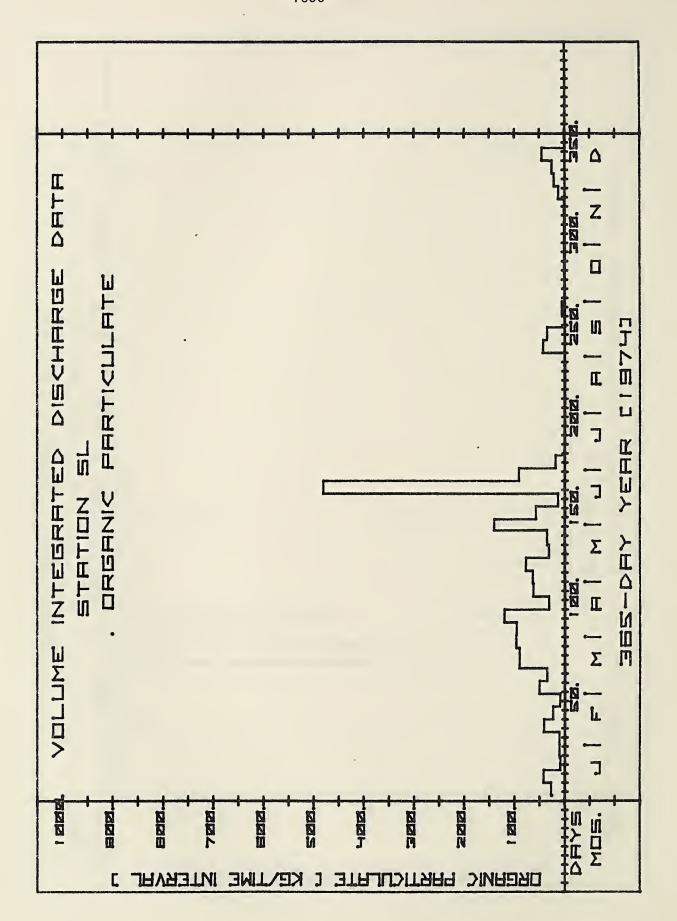


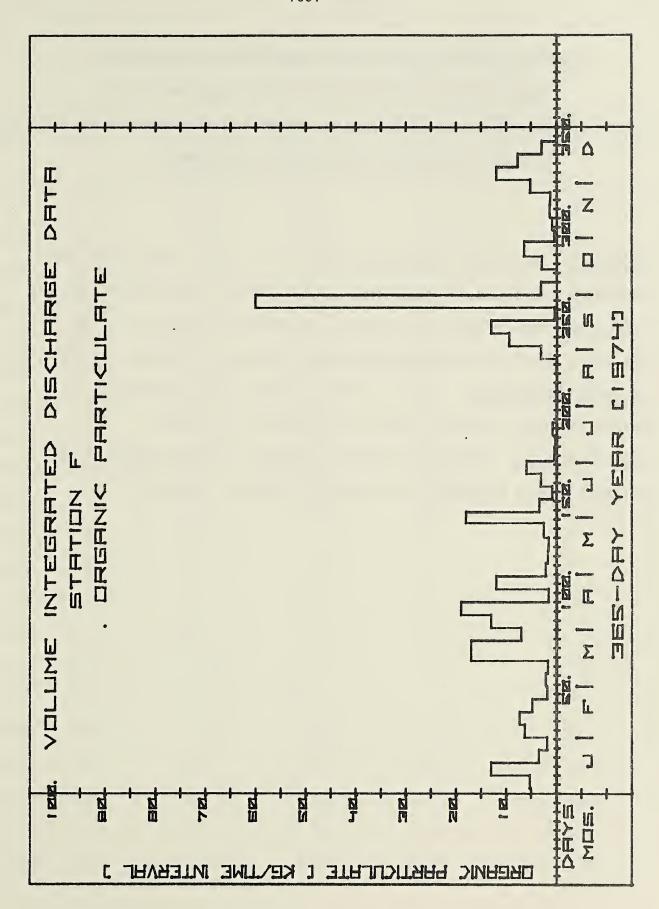












Area Yield of Particulates in Watershed Runoff Per Hectare

Per Time Interval for Five Land Use Categories

Mineral Particulates (Kg/hectare/time interval)

Organic Particulates (Kg/hectare/time interval)

Technique - Particulate discharge data and land use data from Higman (1973 ESP Report) were used to calculate area yield rates as described in Correll, Pierce, and Faust (1975), pp. 131-143. <u>In</u>: Non-Point Sources of Water Pollution, Virginia Water Resources Research Center, Blacksburg, Virginia. <u>Principal Investigator</u>: Jack W. Pierce, Sedimentology Department, National Museum of Natural History, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and Smithsonian Research Foundation.

Area Yield Data from Volume Intergrated Watershed Sampling Suspended Organic Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps	'Natural' areas (forest + old fields)	Grasslands (pasture + other)	Residential + other (bare, paved roads, dumps)
3-10	0.26	25	0.24	0.30	-4.2
10-17	0.38	7.1	0.60	0.12	-6.8
17-24	-0.091	7.4	0.18	-0.36	0.61
24-31	0.070	21	0.026	0.89	-2.0
31-38	-0.10	21	0.25	0.90	-3.8
38-45	0.18	6.5	0.41	-2.0	2.8
45-52	0.040	14	0.30	-1.3	1.0
52-59	-0.012	3.8	0.11	-0.65 ·	1.4
59-66	0.82	-15	0.012	-0.30	1.6
66-73	0.58	-13	-0.023	0.12	1.5
73-84	-2.0	160	1.1	-9.2	36
84-91	-0.023	-14	0.36	-6.8	31
91-98	1.6	-41	0.21	3.5	-7.5
98-105	0.73	-160	-0.057	3.3	27
105-112	0.61	-1.4	-0.13	1.7	-0.87
112-119	0.79	-19	44	58	-4.0
119-126	0.84	-0.89	-0.068	0.013	4.3
126-133	1.6	-58	-0.43	3.6	0.89
133-140	0.62	-25	-0.12	1.2	0.58
140-148	0.57	-22	-0.021	0.46	1.6
148-154	1.2	4.4	0.53	-0.72	9.0

Area Yield Data from Volume Integrated Watershed Sampling Suspended Organic Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps)	<pre>(open water (forest + old (pasture + (</pre>		Residential + other (bare, paved roads, dumps)
154-161	0.94	-32	-0.010	0.16	2.7
161-168	0.39	-14	-22	2.9	-2.4
168-175	8.6	-150	-0.018	-12	21
175-182	1.5	-31	0.10	-0.12	0.70
182-189	0.24	. 15	0.021	-0.23	-0.22
189-196	0.016	-0.24	0.0065	0.029	-0.15
196-203	-0.019	1.1	0.040	0.091	-0.68
203-210	-0.0012	0.072	0.0024	0.0043.	-0.039
210-217	-0.000066	-0.016	0.00036	0.0082	-0.021
217-224	0.0010	-0.095	-0.00066	0.021	-0.033
224-231	0.00014	-0.012	-0.00013	0.0019	-0.0022
231-238	-0.0022	0.13	0.0045	0.010	-0.076
238-245	-0.067	4.4	0.16	0.26	-2.5
245-252	0.62	-4.4	0.39	0.51	-6.4
252-259	0.43	-0.26	0.52	1.6	-10
259-266	0.0089	-1.0	-0.000014	0.28	-0.55
266-273	3.0	-27	-1.6	61	-100
273-280	-0.078	4.6	0.16	0.27	-2.5
280-287	0	0	0	0	0
287-294	0.0099	0.94	0.081	0.97	-3.0
294-302	-0.14	8.4	0.30	0.75	-5.3

Area Yield Data from Volume Integrated Watershed Sampling Suspended Organic Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps)	'Natural' areas (forest + old fields)	Grasslands (pasture + other)	Residential + other (bare, paved roads, dumps)
302-308	-0.0049	0.29	0.015	0.13	-0.44
308-315	-0.0055	0.68	0.038	0.25	-0.99
315-322	-0.0047	1.9	0.061	0.27	-1.3
322-329	-0.0020	. 1.3	0.046	0.26	-1.1
329-336	0.082	0.98	0.21	0.62	-3.4
336-343	0.18	8.4	0.48	2.2	-11
343-350	0.25	-31	0.16	1.4	0.066
350-357	0.42	40	0.23	-1.6	0.017
357-364	0.00027	1.5	0.0045	-0.0030	-0.20
364-365	0.00054	0.11	0.00018	0.0035	-0.0055

Area Yield Data from Volume Integrated Watershed Sampling Suspended Mineral Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps)	'Natural' areas (forest + old fields)	Grasslands (pasture + other)	Residential + other (bare, paved roads, dumps)
3-10	3.3	100	1.2	2.0	23
10-17	4.7	-21	3.5	-2.3	-31
17-24	2.1	-18	1.1	-2.2	3.7
24-31	2.6	-80	0.91	8.8	-1.9
31-38	0.028	. 22	0.32	0.33	2.8
38-45	2.8	-28	0.45	0.86	5.9
45-52	2.2	-6.8	0.64	2.3	-2.8
52-59	1.4	-15	0.89	3.0	-6.4
59-66	3.8	-26	0.86	-6.5	13
66-73	4.8	-11	0.31	0.64	7.2
73-84	-1.1	590	7.8	-88	370
84-91	-2.2	-240	1.3	-61	300
91-98	5.6	-62	2.1	13	-48
98-105	3.4	-1400	-0.82	26	210
105-112	5.4	<b>-</b> 140	-0.25	6.5	1.6
112-119	2.7	-68	0.47	6.0	-15
119-126	2.7	-0.92	0.56	-2.9	3.1
126-133	6.1	-260	-0.51	-8.2	52
133-140	1.7	-50	-0.20	4.5	-5.2
140-148	4.0	-74	0.18	-2.2	8.7
148-154	17.6	-680	3.1	1.3	102

Area Yield Data from Volume Integrated Watershed Sampling Suspended Mineral Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps)	'Natural' areas (forest + old fields)		Residential + other (bare, paved roads, dumps)
154-161	3.6	-0.88	0.45	-2.4	20
161-168	4.4	-22	-2.2	30	-30
168-175	29	-560	-0.25	-37	72
175-182	3.1	-76	0.52	5.6	-13
182-189	0.018	89	0.41	-4.5	2.2
189-196	0.027	-0.11	0.021	0.024	-0.33
196-203	-0.049	2.9	0.10	0.20	-1.6
203-210	0.0030	0.18	0.0060	0.011	-0.097
210-217	-0.00062	0.026	0.0017	0.010	-0.042
217-224	0.00031	-0.050	0.00070	0.022	-0.052
224-231	0.00011	-0.010	-0.000098	0.0019	-0.0025
231-238	-0.0055	0.33	0.011	0.022	-0.18
238-245	-0.28	18	0.61	1.0	-9.8
245-252	0.90	12	1.6	3.4	-28
252-259	0.38	27	2.2	6.7·	-41
259-266	0.053	-5.4	-0.019	1.3	-2.4
266-273	-2.1	-350	25	360	-1000
273-280	-0.31	18	0.62	1.1	-9.9
280-287	0	0	0	0	0
287-294	-0.18	12	0.74	6.7	-23
294-302	-1.2	68	2.4	5.6	-41

Area Yield Data from Volume Integrated Watershed Sampling
Suspended Mineral Particulate (Kg/hectare/time interval)

Days of 1974	Cultivated crops	Wet areas (open water + marshes + swamps)	'Natural' areas (forest + old fields)	Grasslands (pasture + other)	Residential + other (bare, paved roads, dumps)
302-308	-0.048	2.6	0.13	0.85	-3.3
308-315	-0.014	5.4	0.32	1.6	-7.4
315-322	0.065	13	0.52	1.3	-9.5
322-329	0.048	10	0.41	1.3	-8.0
329-336	1.2	· 56	2.1	-2.3	-18
336-343	1.9	168	4.9	0.37	-60
343-350	1.9	-0.028	1.3	-0.59	39
350-357	4.5	19	0.56	-2.2 ·	-2.5
357-364	0.054	4.3	0.059	-0.040	-0.46
364-365	1.5	-24	0.0013	-2.2	3.5

## Cation Concentrations in Surface Waters (µg/liter)

<u>Technique</u> - A sample of 200 ml of whole water plus 6 ml concentrated HNO<sub>3</sub> was concentrated by boiling down to a volume of 5 ml. The concentrate was then analyzed by atomic absorption after various dilutions. Elements analyzed included Ni, Cu, Zn, Pb, Cr, Cd, Mn, Fe, K, Ca, and Mg.

<u>Principal Investigator</u>: Tung-Lin Wu, Chesapeake Bay Center for Environmental Studies.

<u>Research Funding</u>: Smithsonian Research Foundation and the Smithsonian Institution.

Non-Point Sources of Metals (map 2)

	Mg					3080	2400					1680	1960
	K Ca					4285.6 8480	3143.2 6240					3143.2 2240	2286.4 1760
	-F		2000	790	3630	1944	712.8		1200	410	2120	1555.2	9.777
ug/liter)	Mn		100	52	175	227.1	20.6		2100	650	338	144.5	165.1
Metal Concentration (ug/liter)	Б					0.80	2.00					0.64	1.04
	Pb Cr	Station 1				4.96	0.64	Station 2				5.92	pu
	Zn			10	25	22.4	1.6			65	25	17.6	136.8
	Cu					1.60	0.64					2.80	16.00
	N				10	6.16	1.68			25	0	5.12	8.24
Day of	1974		302	329	336	357	364		302	329	336	357	364

nd - non-detectable by the technique employed

Non-Point Sources of Metals (map 2)

	Mg			2200						1880	
	Ca			8480						10720	
	$\times$			2500						2000	
	Fe		4120	259.2			1200	740	2820	1166.4	
ug/liter)	Mn		162	6.19			pu	30	250	165.1	
ration (u	PO			1.04						0.64	
Metal Concentration (ug/liter)	ن	Station 3		1.28		Station 4				1.04	
	Pb										
	Zn		28	20.8				15	22		
	Cu			0.64						16.00	
	Ni		10	4.16					10	4.16	
Dav of	1974		336	364			302	329	336	364	

nd - non-detectable by the technique employed

Non-Point Sources of Metals (map 2)

	Ca Mg				5200 2720	6880 2120						2120
	<b>Y</b>				3071.2 5	2785.6 6						5214 4 8480
	Fe		365	3320	2138.4	259.2			1200	490	12850	9 67/1
ug/liter)	e de		52	. 500	227.1	206.5			200	ဓ္က	212	165.2
Metal Concentration (ug/liter)	EG C	1			1.04	1.44						08
	Ce	Station SL		Station S	Station Signation F						7 84	
Žing.	Pb											
	uZ		25	38	36.0	37.6				0	94	0
	Ca				2.64	5.36						000
	s pass			10	6.16	8.24		·			28	5 7
) c	1974		329	336	357	364			302	329	336	357

Total Coliform, Fecal Coliform and Total Viable Heterotrophic Bacteria in Water Samples Taken as Grab Samples at Freshwater and Estuarine Stations (maps 2 and 3)

Technique - Coliform bacteria were enumerated using the multiple tube dilution technique and the elevated temperature test and the aerobic heterotrophic bacteria, by the spread plate technique respectively, according to the (American Public Health Association, 1971. "Standard Methods for the Examination of Water and Waste Water". 13th ed. APHA, N. Y.). Total coliform and fecal coliform numbers were expressed as most probable numbers per 100 ml (MPN/100ml), the heterotrophic aerobic bacteria as total viable counts per ml (TVC/ml).

<u>Principal Investigator</u>: Maria A. Faust, Chesapeake Bay Center for Environmental Studies, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution's Environmental Science Program.

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## Estimated Total and Fecal Coliforms in Grab Samples

Day of	Weir Station	TC	FC
1974	(map 2)	(MPN/1C	00 m1)
52	1	170	7
	2	130	27
	3	280	180
	SL	94	33
	F	17	4
77	. 1	130	130
	2	540	170
	3	110	46
	SL	17	13
	F	22	22
105	1	79	. 11
	2	130	. 17
	3	79	. 33
	SL	33	. 11
	F	49	. 33
133	1	2,400	2,400
	2	2,400	2,400
	3	920	920
	SL	350	220
	F	920	280
168	1	24,000	11,000
	2	1,500	1,100
	3	1,100	1,100
	SL	4,600	750
	F	4,600	1,100
259	1	93	93
	2	no flow	no flow
	3	no flow	no flow
	SL	no flow	no flow
	F	2,400	2,400
273	1	4,600	1,100
	2	11,000	460
	3	no flow	no flow
	SL	no flow	no flow
	F	2,400	2,400

Estimated Total and Fecal Coliforms and Total Viable Aerobic Heterotrophic Bacterial Population.

Day of 1974	Sites (map 2)	TC (MPN/1	FC 00m1)	Ratio FC/TC	TVCx10 <sup>3</sup> /n Incubatio 24 (hr)	nl after on times of 168 (hr)
294	1 2 3 SL	1,500 11,000 no flow no flow	2,400	0.14	6.0 18.6 no 1	24.1
302	1 2 3 SL F		750 150 no flow no flow 90	0.50	39.0 50.0 no 1 no 1	TNTC flow flow
308	1 2 3 SL F	460 no flow no flow	1,100 460 no flow no flow 4,600	no flow no flow	590.0 330.0 no 1 no 1	355.0 Flow Flow
315	1 2 3 SL F	40	150 < 30 no flow 70 < 30	0.75 no flow	23.0 97.0 no fl 7.5 12.9	135.0 low 12.8
322	1 2 3 SL F Well	75 23 no flow 93 93 9	39 3 no flow 15 43 0	0.13 no flow	1.7 1.9 no fl 7.0 11.3 0.5	9.2 low

TC = Total coliforms
FC = Fecal coliforms
TVC = Total viable counts

TNTC = To numerous to count

Estimated Total and Fecal Coliforms and Total Viable Aerobic Heterotrophic Bacterial Population. (Continued)

Day of 1974	Sites (map 2)	TC (MPN/1	FC 00m1)	Ratio FC/TC		/ml after ion times of 168 (hr)
	,,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
336	1 2 3 SL F Well	460 460 =2,400 =2,400 240 9	460 460 =2,400 460 93 9	1.00 1.00 1.00 0.19 0.39 1.00	140.0 270.0 180.0 350.0 27.0	420.0 730.0 520.0 700.0 72.0 4.2
350	1 2 3 SL F Well	=2,400 =2,400 =2,400 =2,400 =2,400 =23	210 1,100 28 240 1,100 9	0.09 0.46 1.00 0.10 0.46 0.39	320.0 800.0 560.0 330.0 750.0 TNTC	650.0 1,140.0 730.0 490.0 1,100.0 TNTC

TNTC = Too numerous to count.
 TC = Total coliforms
 FC = Fecal coliforms

TVC = Total viable counts

Coliform bacterial discharge rates at designated weirs.

Day of 1974	Weir #	Colif Total (MPN/day)	Fecal	Day of 1974	Weir #	Coli Total (MPN/day	Fecal
52	1 2 3 SL F	1.9 1.2 3.6 0.71 0.0204	0.079 0.25 2.3 0.25 0.0048	294	1 2 3 SL F	1.5 3.3  	1.5 0.72  
77	1 2 3 SL F	3.1 9.3 2.8 0.22 0.055	3.08 2.9 1.2 0.17 0.055	302	1 2 3 SL F	7.5 0.09  0.0072	3.8 0.009  0.0027
105	1 2 3 SL F	2.5 3.2 0.0 0.24 0.24	0.35 0.41 0.00 0.081 0.23	308	1 2 3 SL F.	1.9 0.028   0.66	0.88 0.028  0.28
133	1 2 3 SL F	74 52 27 6.5 1.4	74 52 27 4.1 0.42	315	1 2 3 SL F	0.1 0.008  0.039 0.004	0.075 0.006  0.0063 0.003
168	1 2 3 SL F	250 4.5 3.6 19 1.8	3.3 3.6 3.2 0.44	322	1 2 3 SL F	0.075 0.012  0.037 0.0084	0.039 0.0015  0.006 0.0039
259	1 2 3 SL F	0.0093   0.024	0.0093    0.024	336	1 2 3 SL F	9.5 9.9 36 34 0.17	9.5 9.9 36 6.6 0.065
273	1 2 3 SL F	15 9.9  0.048	3.6 0.41   0.048	350	1 2 3 SL F	295 454 4.1 701 12	25 208 4.1 70 5.6

Fecal Streptococcus Bacteria Populations in Water Samples (map 2)

Technique - Fecal Streptococci and Salmonella-like bacteria were enumerated using the multiple tube dilution technique according to the (American Public Health Association, 1971. "Standard Methods for the Examination of Water and Waste Water". 13th ed. APHA, N. Y.). The results were expressed as most probable numbers per 100 ml (MPN/100ml). Principal Investigator: Maria A. Faust, Chesapeake Bay Center for Environmental Studies, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution's Environmental Science Program.

Estimated Fecal Streptococci Populations in Water Samples Collected at Designated Stations.

Day of	Sites	FS	FC	Ratio
1974	(map 2)	(MPN/100m1)	(MPN/100m1)	FC/FS
259	Weir #1	240	9.00	0.39
	#2	no flow	no flow	no flow
	#3	no flow	no flow	no flow
	SL	no flow	no flow	no flow
	F	=2,400	93.00	0.04
273	Weir #1	1,100	1,100.00	1.00
	#2	=2,400	460.00	0.19
	#3	no flow	no flow	no flow
	SL	no flow	no flow	no flow
	F	=2,400	=2,400.00	1.00
294	Weir #1	750	1,500.00	2.00
	#2	230	2,400.00	10.43
	#3	no flow	no flow	no flow
	SL	no flow	no flow	no flow
	F	no flow	no flow	no flow
302	Weir #1	240	750.00	3.13
	#2	240	150.00	0.63
	#3	no flow	no flow	no flow
	SL	no flow	no flow	no flow
	F	150	90.00	0.60
308	Weir #1	240	1,100.00	4.58
	#2	7,500	460.00	0.06
	#3	no flow	no flow	no flow
	SL	no flow	no flow	no flow
	F	4,600	4,600.00	1.00
315	Weir #1	150	150.00	0.65
	#2	230	< 30.00	1.00
	#3	no flow	no flow	no flow
	SL	230	70.00	0.30
	F	40	< 30.00	0.75
322	Weir #1	15	39.00	2.60
	#2	4	3.00	5.75
	#3	no flow	no flow	no flow
	SL	93	15.00	0.16
	F	93	43.00	0.46

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Estimated Fecal Streptococci Populations. (Continued)

Day of	Sites	FS	FC	Ratio
1974	(map 2)	(MPN/100m1)	(MPN/100m1)	FC/FS
336	Weir #1	460	460.00	1.00
	#2	240	460.00	1.92
	#3	52,400	=2,400.00	1.00
	SL	52,400	460.00	0.19
	F	240	93.00	0.39
350	Weir #1	=2,400	210.00	0.09
	#2	1,100	1,100.00	1.00
	#3	=2,400	28.00	0.01
	SL	=2,400	240.00	0.10
	F	=2,400	1,100.00	0.46

Estimated Salmonella Like Bacterial Populations in Water Samples Collected at Designated Stations.

Day of	Weir #1	Weir #2	Stations (map Weir #3	2) Steinlein Creek	Fox Creek
			(MPN/100ml)	)	
294	460	1,100	no flow	no flow	no flow
302	460	. 43	no flow	no flow	<del>7</del> 2,400
308	93	75	no flow	no flow	28
315	7	15	no flow	14	1,100
322	240	9	no flow	28	150
336	<del>-</del> 2,400	72,400	72,400	1,100	39
350	72,400	72,400	72,400	72,400	11

Identification of Bacteria Other than Pathogenic Organisms (maps 2 and 3)

Technique - Taxonomical analysis of bacteria were adapted from Steiner et al, (1966. The aerobic pseudomonads: a taxonomic study. J. Gen. Microbiol. 43: 159-271) and Baumann et al (1972. Taxonomy of aerobic marine eubacteria. J. Bacteriol. 110: 402-29) using the following characters: 1.) Morphological, gram reactions, motility, type of flagellation, cell shape and morphology of cell structures and morphology of colony characters; 2.) Physiological: utilization and fermentation of carbohydrates, extracellular enzymes, temperature requirements, salt tolerance and catalaze and oxidase reactions. Principal Investigator: Maria A. Faust, Chesapeake Bay Center for

Environmental Studies, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution's Environmental Science Program.

Bacterial Genera Other Than Coliforms Identified from Water Samples Collected from June to September,  $1974.^{\rm a}$ 

		Stati	ions (map 2)		
genera	Weir 1	Weir 2	Weir 3	Steinlein Br.	Fox Cr.
Bacillus	<sup>+</sup> p	+	+	+	-
Aeromonas	+	+	-	+	-
Pseudomonas	. +	-	-	-	-
Chromobacter	+	+	-	-	-
Proteus	_c	-	+	-	-
Streptococcus	+	+	-		+
Flavorbacterium	-	-	-	+	+
Chromobacterium	-	-	-	-	-

a) colonies were identified from nutrient agar plates.

b) genera present +

c) genera absent -

Surface and Bottom Water Stations (maps 2, 3, and 4)

рН

Temperature (O C)

pH - Measured using a Hellige color comparator.

<u>Temperature</u> - Measured in the field using a centigrade thermometer or a thermister.

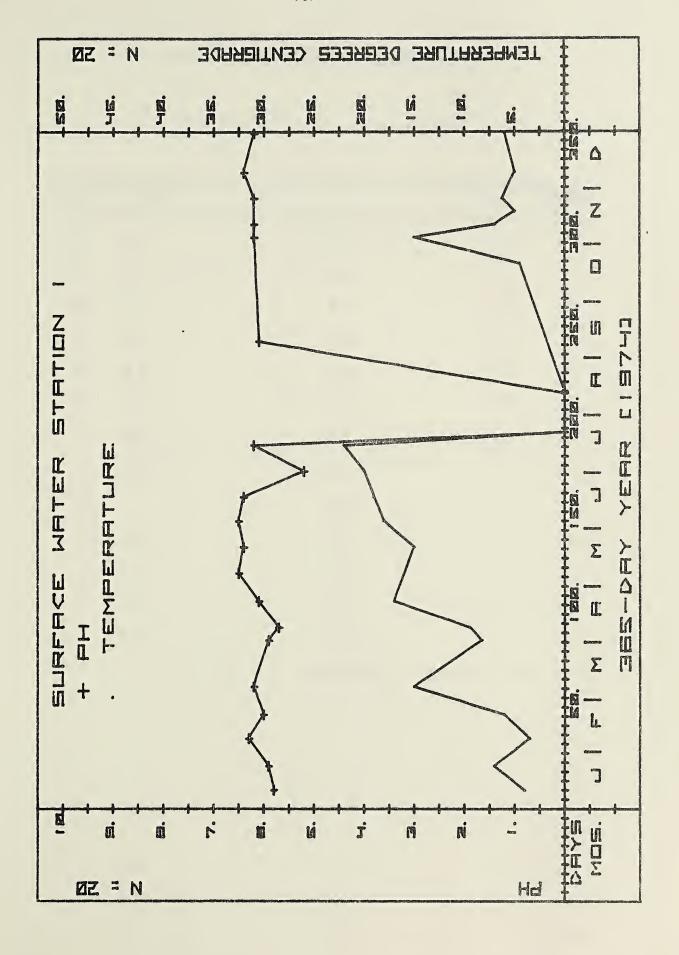
<u>Principal Investigator</u>: David L. Correll, Radiation Biology Laboratory, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution's Environmental Sciences Program.

Surface Water Station 1 (map 2) pH Temperature  $^{\rm O}{\rm C}$ 

Day of 1974	рН	Temperature oc
10	5.8	4.0
23	5.9	7.0
38	6.3	3.5
51	6.0	6.0
66	6.2	15.0
91	5.9	8.3
98	5.7	9.4
112	6.1	17.0
127	6.5	-
141	6.4	15.0
155	6.5	18.0
168	6.4	19.0
182	5.2	20.0
196	6.2	22.0
203	Stream Dry	
210	n n	
224	n n	
252	6.1	-
294	-	4.5
308	6.2	15.0
315	6.2	7.0

Day of 1974	На	Temperature OC
322	-	5.0
329	6.2	6.2
343	6.4	5.0
364	6.2	6.0
	N=20	N=20

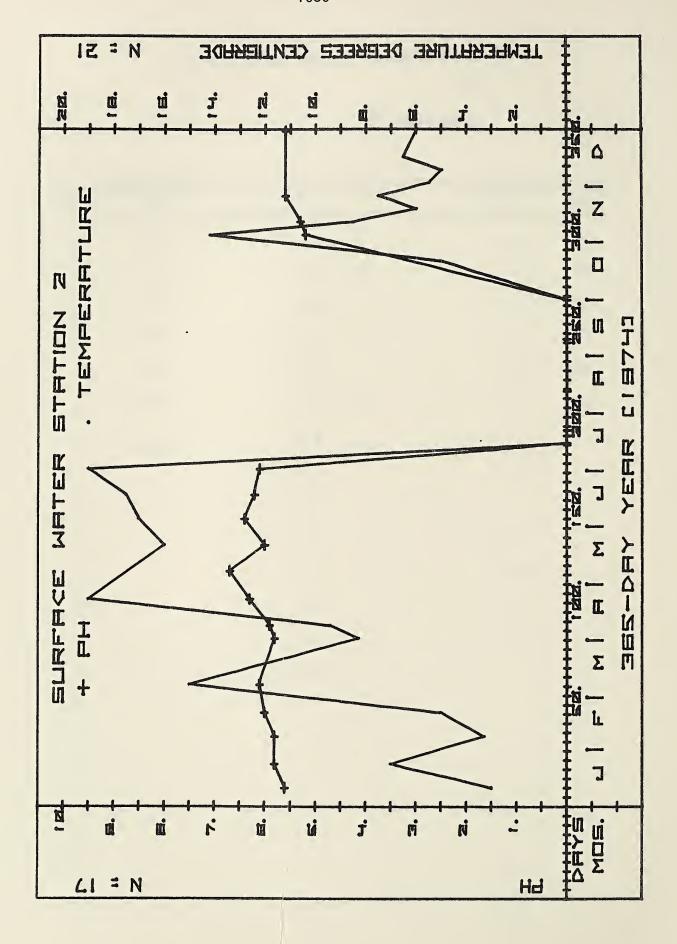


Surface Water Station 2 (map 2)  $\,$  pH  $\,$  Temperature  $\,$   $^{\rm O}{\rm C}$ 

Day of 1974	рН	Temperature oc
10	5.6	3.0
23	5.8	7.0
38	5.8	3.3
51	6.0	5.0
66	6.1	15.0
91	5.8	8.3
98	5.9	. 9.4
112	6.3	19.0
127	6.7	-
141	6.0	16.0
155	6.4	17.0
168	6.2	17.5
182	6.1	19.0
196	Stream Dry	
203	11 11	
210	н н	
224	11 11	
252	н	
273	ш	
294	-	5.0
308	5.2	14.2
315	5.3	8.5

Surface Water Station 2 (Cont'd) pH  $\label{eq:cont_obj} \mbox{Temperature }^{O}\mbox{C}$ 

Day of 1974	рН	Temperature <sup>O</sup> C
322	-	6.0
329	5.6	7.5
336	-	5.5
343	· -	5.0
350	-	6.5
364	5.6	6.0
	N=17	N=21

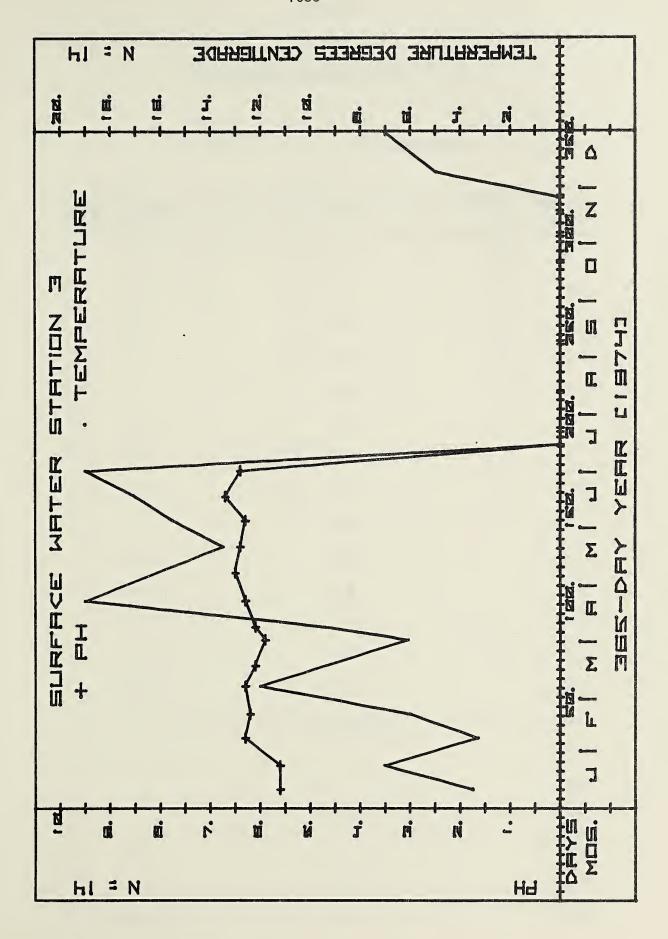


Surface Water Station 3 (map 2) pH Temperature  ${}^{\rm O}{\rm C}$ 

Day of 1974	рН	Temperature °C
10	5.6	3.5
23	5.6	7.0
38	6.3	3.3
51	6.2	6.0
66	6.3	12.0
77	6.1	-
91	5.9	. 6.1
98	6.1	9.4
112	6.3	19.0
127	6.5	-
141	6.4	13.5
155	6.3	15.5
168	6.7	17.0
182	6.4	19.0
196	Stream Dry	
203	н и	
210	н	
224	11 11	
252	n n	
294	n n	
308	и и	

Surface Water Station 3 (Cont'd) pH  $\label{eq:cont_obj}$  Temperature  $^{\rm O}{\rm C}$ 

Day of 1974	рН	Temperature °C
315	Stream Dry	
322	II II	
329	H H	
343	· -	5.0
364	- 1	7.0
	N=14	N=14

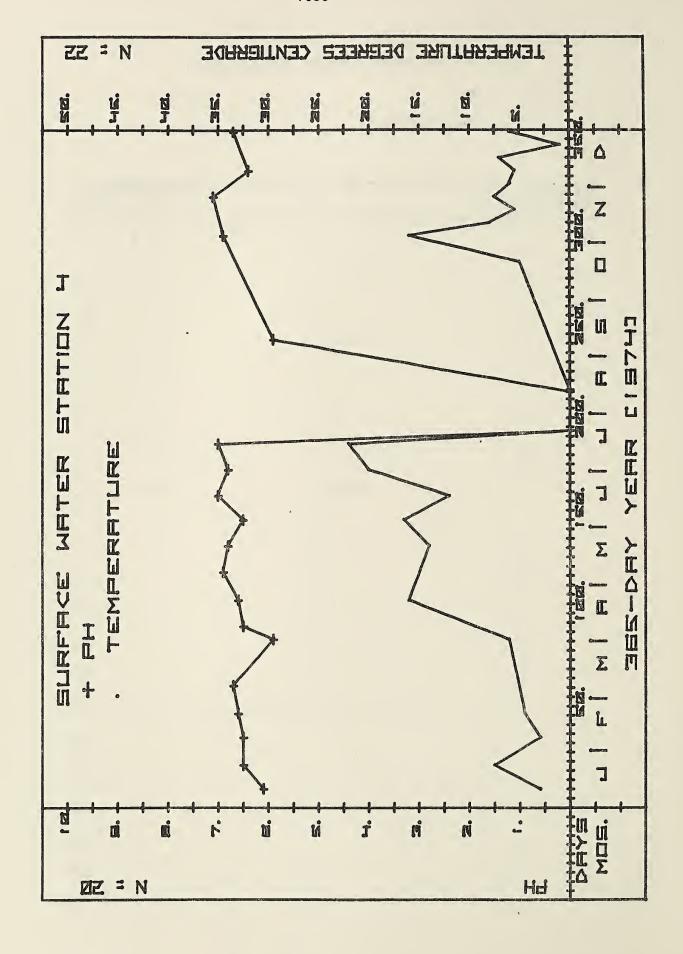


Surface Water Station 4 (map 2)  $\,$  pH  $\,$  Temperature  $\,$  OC

Day of 1974	рН	Temperature oc
10	6.1	3.0
23	6.5	7.5
38	6.5	3.0
51	6.6	4.5
66	6.7	-
91	5.9	6.1
98	6.5	9.4
112	6.6	16.0
127	6.9	-
141	6.8	14.0
155	6.5	16.5
168	7.0	12.0
182	6.8	20.0
196	7.0	22.0
203	Stream Dry	
210	п	
224	и и	
252	5.9	-
294	-	5.0
308	6.9	16.0
315	7.0	8.0

Surface Water Station 4 (Cont'd) pH  $\label{eq:cont_obj}$  Temperature  $^{\rm O}{\rm C}$ 

Day of 1974	рН	Temperature <sup>O</sup> C
322	-	5.5
329	7.1	7.5
336	-	6.0
343	6.4	5.5
350	-	7.0
357	-	1.0
364	6.7	. 6.0
	N=20	N=22



Surface Water Station SL (map 2)  $\,$  pH  $\,$  Temperature  $\,$   $^{\rm O}{\rm C}$ 

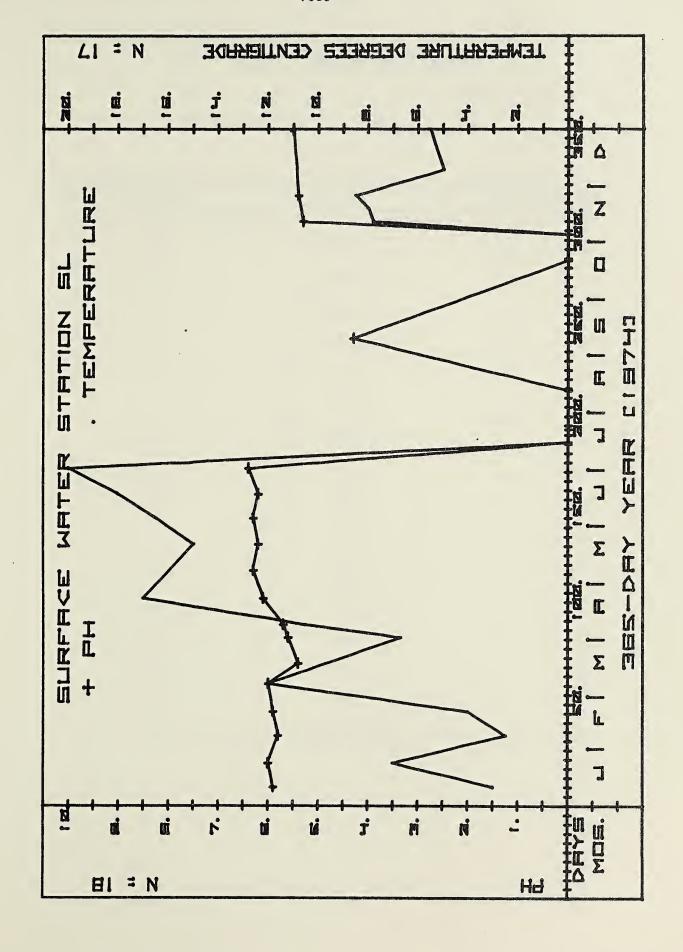
Day of 1974	рН	Temperature oc
10	5.9	3.0
23	6.0	7.0
38	5.8	2.5
51	5.9	4.0
66	6.0	12.0
77	5.4	-
91	5.6	. 6.7
98	5.7	10.5
112	6.1	17.0
127	6.3	-
141	6.2	15.0
155	6.3	16.5
168	6.2	18.0
182	6.4	20.0
196	Stream Dry	
203	и и	
210	н н	
224	и и	
252	4.3	-
294	Stream Dry	
308	H H	

Surface Water Station SL (Cont'd)

pH

Temperature OC

Day of 1974	рН	Temperature oc
315	5.3	7.8
322	-	8.0
329	5.4	8.5
343	-	5.0
364	5.5	5.5
	N=18	N=17

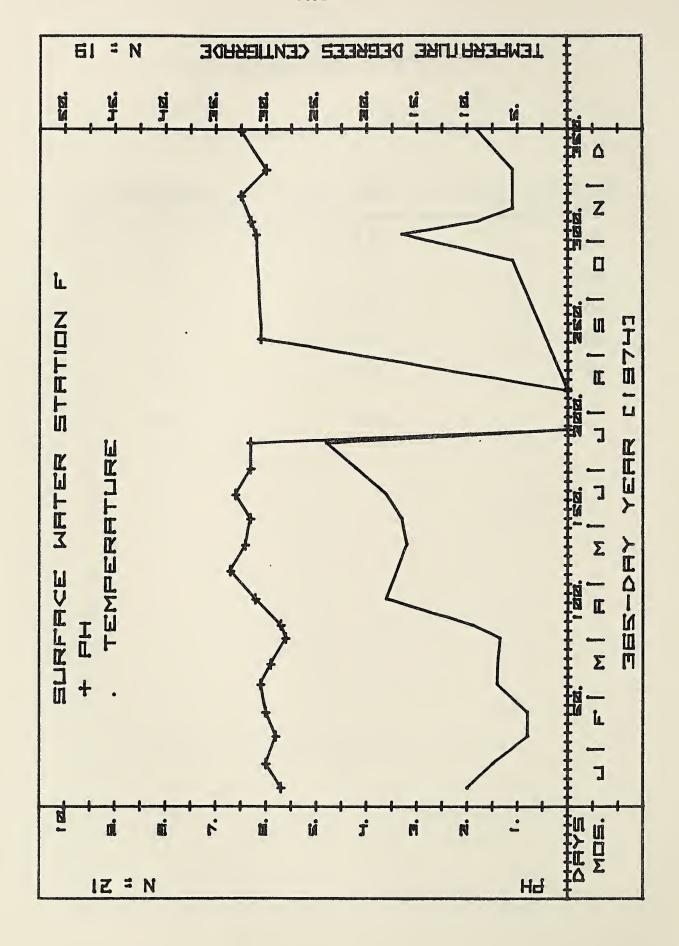


Surface Water Station F (map 2)  $\,$  pH  $\,$  Temperature  $\,$  OC

Day of 1974	рН	Temperature OC
10	5.7	10.0
23	6.0	7.5
38	5.8	4.0
51	6.0	4.0
66	6.1	7.0
77	5.9	-
91	5.6	. 6.7
98	5.7	9.4
112	6.2	18.0
127	6.7	-
141	6.4	16.0
155	6.3	16.5
168	6.6	18.0
182	6.3	21.0
196	6.2	24.0
203	Stream Dry	
210	u u	
224	н н	
252	6.1	_
294	-	5.5
308	6.2	16.5

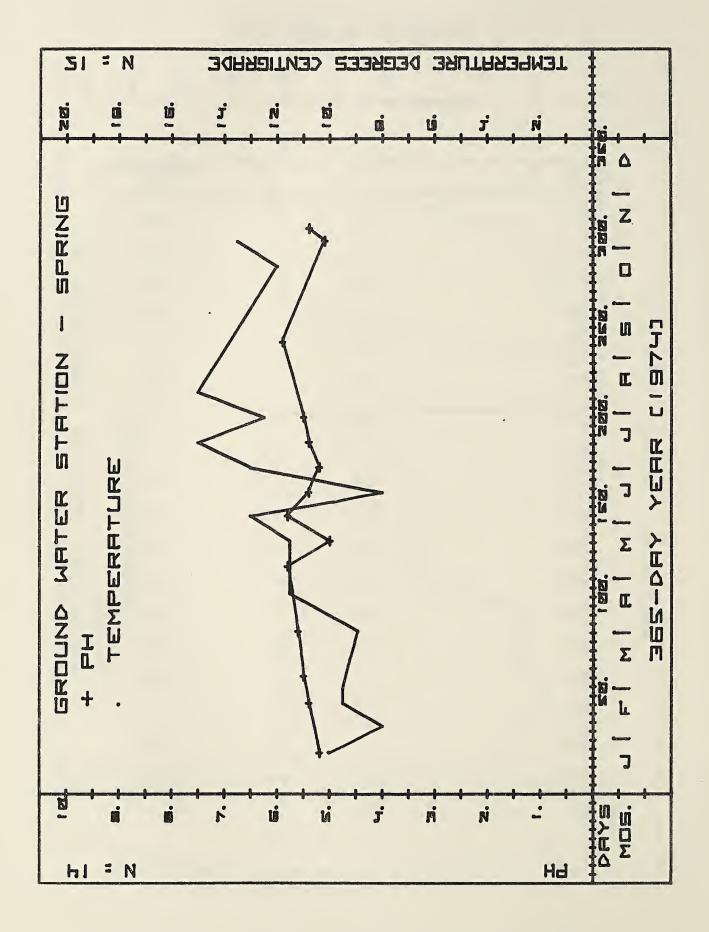
Surface Water Station F (Cont'd) pH  $\label{eq:cont_obj} \mbox{Temperature }^{O}\mbox{C}$ 

Day of 1974	рН	Temperature °C
315	6.3	9.0
322	-	5.5
329	6.5	-
343	6.0	5.5
364	6.5	9.0
	N=21	N=19



Groundwater - Spring pH Temperature <sup>O</sup>C

Day of 1974	рН	Temperature OC
23	5.2	10.0
38	-	8.0
51	5.4	9.5
59	-	9.5
66	5.5	-
91	5.6	8.9
112	-	. 11.5
127	5.8	-
141	5.0	11.5
155	5.8	13.0
168	5.4	8.0
182	5.2	13.0
196	5.4	15.0
210	5.5	12.5
224	-	15.0
252	5.9	-
294	•	12.0
308	5.1	13.5
315	5.4	-



## Description of Forest Ecology Intensive Study Sites 1 through 8

The locations of the initial eight intensive study sites are shown on the following map. A general description of each site and the original reason for picking it follows.

<u>Study site 1</u> - Believed, on the basis of oral history (as reported by Dan Higman), 19th century charts, and its basic unsuitability for agriculture to have never been clear cut or cultivated. Thus, it is perhaps our most likely example of relatively undisturbed deciduous forest.

Study site 2 - Identical to site 1, especially in the southern part.

Current aerial photos clearly delineate this whole site from its surroundings on the basis of canopy height, but the northern part may have been cultivated in early colonial period.

Study site 3 - Oral histroy (as reported by Dan Higman) and aerial photos taken in 1943 indicate this area has not been disturbed since approximately the 1830's but was used as a slave quarters and slave burial grounds prior to that time. As far as can be determined, this site was never cultivated. Much evidence including some archaeological study by Henry Wright indicates it was periodically inhabited by Indians (villages) for several thousand years prior to colonization. Soil is black and many oyster shells are buried in the soil. A radiocarbon date of A.D.  $685 \pm 65$  was obtained on shells at depths of 15 to 30 cm by Robert Stuckenrath of the Smithsonian's Radiation Biology Laboratory. A deciduous forest but with a relatively open canopy and of an unusual species composition.

<u>Study site 4</u> - A relatively homogeneous mature deciduous forest in which the oldest oaks (by tree core anlaysis) data back to the 1830's.

Believed on the basis of land use records (Dan Higman) to have been cultivated between 1650's and 1830's.

Study site 5 - A young deciduous forest which was under cultivation (from aerial photos) in 1943 and was then within a year or so abandoned.

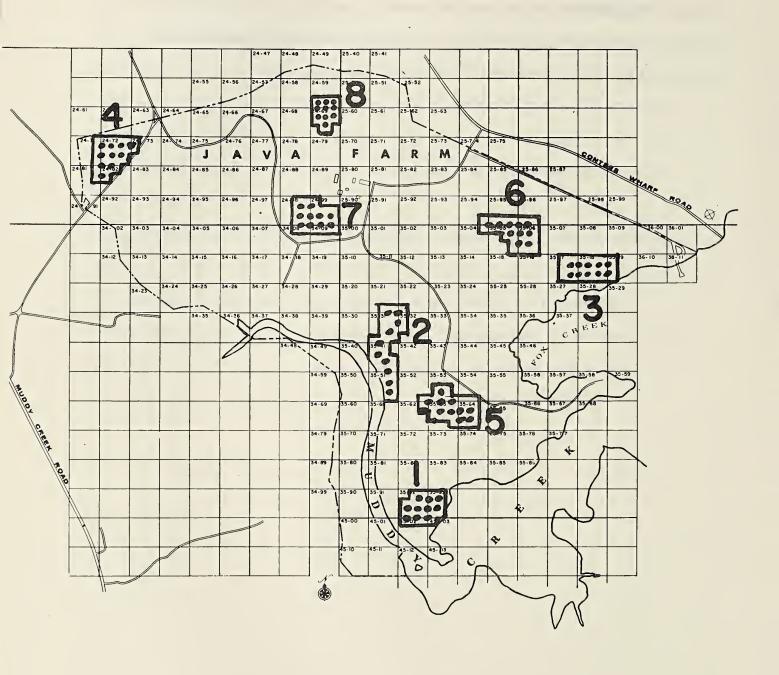
Study site 6 - An area of vines and brambles with 'islands' of a few tree species such as sassafras. Its history was otherwise similar to that of site 5.

Study site 7 - An area of mixed patches of young trees and brush/vines, which was a mule pasture until 1930's or 1940's, when it was abandoned (as determined from oral history and aerial photos by Dan Higman).

Study site 8 - An area of wet pastureland covered with an introduced grass species (canary grass). It was abandoned in 1940's and still has essentially no trees, bushes, or vines present.

Location of Forest Ecology Intensive Study sites one through 8. Dots within areas are the locations of litter boxes. Box numbers begin with one at the western end of the northernmost row at site 1 and progress in the same manner as the words on a page. Site 2 box numbers begin with number 11, site 3 with 21, etc.

## FOREST ECOLOGY AREAS HECTARE COORDINATES OF JAVA FARM



Soil Sampling and Nutrient Analysis in Forest Ecology Sites

<u>Technique</u> - Soil cores were taken with coring tubes adjacent to each litter box at each site. Each core was divided into surface litter and segments (0-3, 3-5, 5-8, 8-12, 12-18, 18-24, and 24-30 cm). Segments of like depth from adjacent stations were composited, blended, and subsampled for various parameters. The composited samples were designated as follows:

```
5A - boxes 41, 42, 43
1A - boxes 1, 2, 3
1B - boxes 4, 5, 6
1C - boxes 7, 8, 9, 10
2A - boxes 11, 12, 13
2B - boxes 14, 15, 16
                                                 5B - boxes 44, 45, 46
                                                5C - boxes 47, 48, 49, 50
6A - boxes 51, 52, 56
                                                 6B - boxes 53, 54, 55
2C - boxes 17, 18, 19, 20
3A - boxes 25, 29, 30
                                                 6C - boxes 57, 58, 59, 60
                                                7A - boxes 61, 62, 63
3B - boxes 23, 24, 28
                                                7B - boxes 64, 67, 68, 69
3C - boxes 21, 22, 26, 27
4A - boxes 31, 32, 33, 34
4B - boxes 35, 36, 37
                                                7C - boxes 65, 66, 70
                                                8A - boxes 71, 72, 73
                                                 8B - boxes 74, 75, 76
4C - boxes 38, 39, 40
                                                8C - boxes 77, 78, 79, 80
```

Sampling, compositing, blending, subsampling, dry weight analysis, total phosphorus analysis, and Kjeldahl N analysis were done as described in Correll and Miklas (In Press) Symp. Mineral Cycling in Southeastern Ecosystems, Augusta, Ga., May 1974. pH was determined on a distilled water sluury of soil.

Organic carbon was determined by combustion of acidified samples in oxygen for 10 min. at  $550 - 600^{\circ}$ , purification and weighing of the released carbon dioxide.

Organic matter was also determined as g-calories by wet digestion as described by Maciolek (1962), U. S. Fisheries and Wildlife Service Report #60.

<u>Principal Investigator</u>: David L. Correll, Chesapeake Bay Center for Environmental Studies.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation.

Forest Soil - pH and Nutrient Composition

Site 1 - Day 224, 1974

Depth Boxes	рН	Phosphorus (mo	Kjel-N g/g dry weig	Organic Carbon yht)	Organic Matter (g cal/g dry wt.)
Litter A	4.70	1.03	20.4	474	Ē
B	4.71	1.08	17.8	474	
C	4.61	1.84	17.3	539	
Mean <u>+</u>	4.67	1.32	18.5	496	:
Standard Dev.	0.06	0.453	1.62	37.9	
0-3 cm A	4.50	0.730	6.68	203	=
B	4.69	0.889	11.6	478	
C	4.40	1.07	12.5	323	
Mean <u>+</u>	4.53	0.896	10.2	335	-
Standard Dev.	0.15	0.169	3.11	138	
3-5 cm A	4.77	0.008	3.38	187	=
B	4.58	0.812	3.88	109	
C	4.63	0.882	2.99	117	
Mean <u>+</u>	4.66	0.830	3.42	138	=
Standard Dev.	0.10	0.46	0.449	43.0	
5-8 cm A	4.93	0.680	1.07	47.8	=
B	4.80	2.03	2.31	104	
C	4.62	0.948	1.72	31.4	
Mean <u>+</u>	4.78	1.22	1.70	61.1	Ξ
Standard Dev.	0.16	0.817	0.620	38.1	
8-12 cm A	4.76	0.990	1.14	33.2	-
B	4.80	1.45	1.47	82.7	-
C	4.67	1.02	1.57	31.2	-
Mean <u>+</u>	4.74	1.15	1.39	49.0	-
Standard Dev.	0.07	0.260	0.224	29.2	

Forest Soil - pH and Nutrient Composition
Site 1 - Day 224, 1974

Depth Boxes	рН	Phosphorus (mg	Kjel-N /g dry weigh	Organic Carbon nt)	Organic Matter (g cal/g dry wt.)
12-18 cm A	4.82	1.02	0.915	12.6	Ē
B	4.64	1.45	0.940	21.0	
C	4.53	1.09	0.964	20.4	
Mean <u>+</u>	4.66	1.19	0.940	18.0	-
Standard Dev.	0.15	0.232	0.025	4.70	
18-24 cm A	4.75	0.796	0.513	4.13	=
B	4.79	1.60	0.809	15.4	
C	4.65	1.08	0.701	14.3	
Mean <u>+</u>	4.73	1.16	0.674	11.3	Ī
Standard Dev.	0.07	0.406	0.150	6.22	
24-30 cm A	4.30	0.820	0.630	5.17	=
B	4.93	1.28	0.528	6.24	
C	4.53	1.12	0.478	12.9	
Mean <u>+</u>	4.75	1.07	0.545	8.11	-
Standard Dev.	0.20	0.233	0.077	4.19	

Forest Soil - pH and Nutrient Composition Site 2 - Day 239, 1974

Depth	Boxes	рН	Phosphorus (mg	Kjel-N /g dry weig	Organic Carbon ht)	Organic Matter (g cal/g dry wt.)
Litter	A B C	5.34 5.14 4.84	1.10 1.30 1.29	14.5 17.9 18.7	346 300 315	- - -
Mean <u>+</u> Standard	Dev.	5.11 0.25	1.23 0.110	17.1 2.24	320 23.9	-
0-3 cm	A B C	5.70 4.38 4.32	0.566 0.878 0.630	3.17 7.30 6.12	34.7 213 106	- - -
Mean <u>+</u> Standard	Dev.	4.80 0.78	0.691 0.165	5.53 2.13	118 89.9	-
3-5 cm	A B C	5.50 4.40 4.45	0.639 0.599 0.700	5.74 3.24 2.98	15.1 66.5 66.4	- - -
Mean <u>+</u> Standard	Dev.	4.78 0.62	0.646 0.051	3.99 1.53	49.4 29.6	-
5-8 cm	A B C	5.09 4.34 4.68	0.564 0.390 0.444	1.72 1.22 1.52	33.0 13.2 34.2	- - -
Mean <u>+</u> Standard	Dev.	4.70 0.38	0.466 0.089	1.48 0.251	26.8 11.8	÷
8-12 cm	A B C	5.11 4.32 4.84	0.844 0.390 0.457	2.11 0.909 1.15	24.7 7.15 36.5	=
Mean <u>+</u> Standard	Dev.	4.76 0.40	0.564 0.245	1.39 0.637	22.8 14.8	·

Forest Soil - pH and Nutrient Composition
Site 2 - Day 239, 1974

Depth Boxes	рН	Phosphorus (mg	Kjel-N /g dry weig	Organic Carbon ght)	Organic Matter (g cal/g dry wt.)
12-18 cm A	4.78	0.436	0.828	5.71	-
B	4.47	0.367	0.645	5.97	
C	4.74	0.402	0.680	11.2	
Mean <u>+</u>	4.66	0.402	0.718	7.64	_ :
Standard Dev.	0.17	0.035	0.097	3.13	
18-24 cm A	4.77	0.374	0.400	2.91	=
B	4.43	0.423	0.475	5.33	
C	4.80	0.307	0.433	6.94	
Mean <u>+</u>	4.67	0.368	0.436	5.06	= =
Standard Dev.	0.21	0.058	0.038	2.03	
24-30 cm A	4.53	0.668	0.617	3.39	-
B	4.41	0.523	0.595	2.74	
C	4.62	0.269	0.292	4.05	
Mean <u>+</u>	4.52	0.487	0.501	3.40	- :
Standard Dev.	0.11	0.202	0.182	0.655	

Forest Soil - pH and Nutrient Composition Site 3 - Day 267, 1974

Depth B	oxes	F Hq	Phosphorus (mg/	Kjel-N g dry weigh	Organic Carbon t)	Organic Matter (g cal/g dry wt.)
Litter	A	5.01	1.63	17.2	429	4090
	B	5.42	1.03	19.5	346	3410
	C	5.22	0.939	15.1	468	2290
Mean <u>+</u>	ev.	5.22	1.20	17.3	415	3260
Standard D		0.21	0.377	2.21	62.2	908
0-3 cm	A	6.58	0.941	5.61	107	493
	B	6.31	0.851	5.45	121	609
	C	5.40	0.785	4.56	94.9	622
Mean <u>+</u>	ev.	6.10	0.859	5.20	108	575
Standard Do		0.62	0.078	0.563	13.1	71.4
3-5 cm	A	6.84	0.830	4.61	89.9	561
	B	6.33	0.897	5.70	136	578
	C	5.79	0.811	4.92	70.4	391
Mean <u>+</u>	ev.	6.32	0.846	5.07	98.8	510
Standard Do		0.53	0.045	0.560	33.7	102
5-8 cm	A	7.43	0.706	3.20	72.9	357
	B	6.59	0.798	4.38	80.1	398
	C	5.57	1.11	3.89	63.1	367
Mean <u>+</u>	ev.	6.59	0.871	3.82	72.1	374
Standard De		0.84	0.211	0.591	8.54	20.4
8-12 cm	A	7.86	0.684	2.45	49.1	258
	B	7.10	0.870	2.79	47.5	248
	C	5.68	0.82 <b>7</b>	2.40	39.0	150
Mean <u>+</u>	ev.	6.88	0.794	2.550	45.2	241
Standard De		1.11	0.097	0.213	5.41	20.4

Forest Soil - pH and Nutrient Composition
Site 3 - Day 267, 1974

Depth Boxes	рН	Phosphorus (mo	Kjel-N µ/g dry weig	Organic Carbon ght)	Organic Matter (g cal/g dry wt.)
12-18 cm A	7.61	0.586	1.65	27.8	150
B	7.37	0.754	1.63	-	122
C	5.63	0.712	1.39	21.1	116
Mean <u>+</u>	6.87	0.684	1.56	24.5	129
Standard Dev.	1.08	0.087	0.144	4.75	17
18-24 cm A	7.23	0.520	1.041	-	78.2
B	6.47	0.689	1.11	17.8	71.4
C	5.57	0.550	0.718	8.67	47.6
Mean <u>+</u>	6.42	0.586	0.956	13.2	64.6
Standard Dev.	0.83	0.090	0.209	6.44	0.7
24-30 cm A	6.72	0.552	1.150	12.5	64.6
B	6.37	0.718	0.811	11.4	54.4
C	5.63	0.825	0.826	14.0	47.6
Mean <u>+</u>	6.24	0.698	0.929	12.6	54.4
Standard Dev.	0.56	0.138	0.192	1.33	10.2

Forest Soil - pH and Nutrient Composition Site 4 - Day 310, 1974

Depth	Boxes	рН	Phosphorus (mg/	Kjel-N g dry weigh	Organic Carbon t)	Organic Matter (g cal/g dry wt.)
Litter	A	5.2	1.41	15.6	518	10700
	B	5.3	1.43	12.4	379	7330
	C	5.2	2.50	16.2	466	6280
Mean <u>+</u>	Dev.	5.23	1.78	14.7	454	8100
Standard		0.06	0.622	2.05	70.5	2300
0-3 cm	A	4.8	0.453	2.72	95.7	966
	B	5.2	0.548	2.03	43.8	738
	C	5.1	0.704	2.10	60.2	476
Mean <u>+</u>	Dev.	5.03	0.568	2.28	66.5	728
Standard		0.21	0.127	0.379	26.5	245
3-5 cm	A	4.9	0.566	1.97	35.1	503
	B	5.2	0.604	1.57	89.1	428
	C	5.2	0.846	1.64	73.5	316
Mean <u>+</u>	Dev.	5.10	0.672	1.72	65.9	415
Standard		0.17	0.152	0.212	27.8	95.2
5-8 cm	A	5.0	0.376	1.19	32.1	2520
	B	5.1	0.391	1.17	35.1	238
	C	5.1	0.767	1.42	59.2	585
Mean <u>+</u>	Dev.	5.07	0.511	1.26	42.1	357
Standard		0.06	0.222	0.138	14.9	197
8-12 cm	A	5.1	0.565	1.12	33.2	381
	B	5.2	0.602	0.835	50.3	272
	C	5.2	0.560	0.757	29.2	129
Mean <u>+</u>	Dev.	5.17	0.576	0.903	37.6	262
Standard		0.06	0.023	0.190	11.2	126

Forest Soil - pH and Nutrient Composition Site 4 - Day 310, 1974

Depth Boxes	рН	Phosphorus (mg	Kjel-N /g dry weig	Organic Carbon ght)	Organic Matter (g cal/g dry wt.)
12-18 cm A	5.1	0.595	1.03	26.8	178
B	5.1	0.846	0.959	27.0	160
C	5.1	1.10	1.12	34.4	129
Mean <u>+</u>	5.10	0.848	1.04	29.4	156
Standard Dev.	0.00	0.254	0.081	4.33	23.8
18-24 cm A	5.0	0.597	0.621	16.5	81.6
B	5.1	0.676	0.550	14.0	95.2
C	5.0	1.10	0.697	20.8	88.4
Mean <u>+</u>	5.03	0.790	0.623	17.1	88.4
Standard Dev.	0.06	0.269	0.074	34.6	6.8
24-30 cm A	5.0	0.373	0.448	9.82	51
B	5.1	0.425	0.291	8.52	40.8
C	5.0	1.11	0.552	14.6	51
Mean <u>+</u>	5.03	0.636	0.430	11.0	47.6
Standard Dev.	0.06	0.411	0.132	3.22	6.8

Forest Soil - pH and Nutrient Composition Site 5 - Day 330, 1974

Depth	Boxes	рН	Phosphorus (m	Kjel-N ng/g dry weig	Organic Carbon ght)	Organic Matter (g cal/g dry wt.)
Litter	A	4.9	1.28	11.0	327	4110
	B	5.0	2.37	8.39	400	3640
	C	5.5	3.55	13.3	561	4880
Mean <u>+</u>	Dev.	5.13	2.40	10.9	429	4210
Standard		0.32	1.13	2.44	120	626
0-3 cm	A	5.9	1.02	2.57	54.2	374
	B	5.9	0.820	2.61	73.9	316
	C	5.8	1.06	2.97	55.7	694
Mean <u>+</u>	Dev.	5.87	0.964	2.72	61.2	462
Standard		0.06	0.127	0.217	11.0	204
3-5 cm	A	5.6	1.10	2.58	31.9	187
	B	5.5	0.897	2.50	39.1	173
	C	5.5	0.989	2.19	48.7	479
Mean <u>+</u>	Dev.	5.53	0.997	2.42	39.9	279
Standard		0.06	0.104	0.204	8.46	173
5-8 cm	A	5.3	1.09	2.02	30.1	180
	B	5.3	1.03	2.18	43.3	187
	C	5.1	0.958	1.43	35.3	-
Mean <u>+</u>	Dev.	5.23	1.03	1.88	36.3	184
Standard		0.12	0.068	0.396	6.64	3.4
8 <b>-</b> 12 cm	A	5.1	1.32	1.78	31.9	156
	B	5.2	0.775	1.84	41.6	218
	C	5.0	0.732	1.18	17.7	160
Mean <u>+</u>	Dev.	5.10	0.943	1.60	30.4	177
Standard		0.10	0.329	0.360	12.0	34

Forest Soil - pH and Nutrient Composition Site 5 - Day 330, 1974

Depth Boxes	рН	Phosphorus (mg	Kjel-N /g dry weig	Organic Carbon ht)	Organic Matter (g cal/g dry wt.)
12-18 cm A	5.6	0.797	1.04	9.11	78.2
B	5.6	0.378	1.10	12.5	116
C	5.4	0.853	1.32	14.0	156
Mean <u>+</u>	5.53	0.677	1.15	11.9	116
Standard Dev.	0.12	0.260	0.148	2.52	40.8
18-24 cm A	5.5	0.692	0.886	12.5	88.4
B	5.6	0.648	1.01	15.8	74.8
C	5.5	0.906	1.05	12.3	95.2
Mean <u>+</u>	5.53	0.749	0.983	13.5	85
Standard Dev.	0.06	0.138	0.087	1.96	10.2
24-30 cm A	5.5	1.40	1.14	17.1	85
B	5.5	0.824	0.747	11.3	40.8
C	5.4	0.624	0.829	14.9	64.6
Mean <u>+</u>	5.47	0.952	0.905	14.5	64.6
Standard Dev.	0.06	0.405	0.207	2.93	23.8

Forest Soil - pH and Nutrient Composition
Site 6 - Day 81, 1974

Depth Bo	xes pH	Phosphoru	s Kjel-N (mg/g dry wei	Organic Carbon ight)	Organic Matter (g cal/g dry wt.)
	A 4.96	1.10	14.5	346	4460
	B 5.01	1.30	17.9	300	2980
	C 5.05	1.29	18.7	315	2980
Mean <u>+</u>	5.01	1.23	17.1	32.0	3370
Standard De	v. 0.05	0.110	2.24	23.9	962
	A 5.70	0.566	3.17	34.7	415
	B 4.38	0.878	7.30	213	476
	C 4.32	0.630	6.12	106	340
Mean <u>+</u>	4.80	0.691	5.53	118	411
Standard De	0.78	0.165	2.13	899	68
	A 5.50	0.639	5.74	15.1	204
	B 4.40	0.599	3.24	66.5	320
	C 4.45	0.700	2.98	66.4	377
Mean <u>+</u>	4.78	0.646	3.99	49.4	299
Standard De	v. 0.62	0.051	1.53	29.6	88.4
	A 5.09	0.564	1.72	33.0	262
	B 4.34	0.390	1.22	13.2	146
	C 4.68	0.444	1.52	34.2	371
Mean <u>+</u>	4.70	0.466	1.48	26.8	258
Standard De	v. 0.38	0.089	0.251	11.8	112
	A 5.11	0.844	2.11	24.7	143
	B 4.32	0.390	0.909	7.15	207
	C 4.84	0.457	1.15	36.5	109
Mean <u>+</u>	4.76	0.564	1.39	22.8	153
Standard De	v. 0.40	0.245	0.637	14.8	51

Forest Soil - pH and Nutrient Composition
Site 6 - Day 281, 1974

Depth Boxes	рН	Phosphorus (m	Kjel-N g/g dry weig	Organic Carbon ht)	Organic Matter (g cal/g dry wt.)
12-18 cm A	4.78	0.436	0.828	5.71	105
B	4.47	0.357	0.645	6.00	102
C	4.74	0.402	0.680	11.2	207
Mean <u>+</u>	4.66	0.402	0.718	7.64	139
Standard Dev.	0.17	0.035	0.097	3.13	61.2
18-24 cm A	4.77	0.374	0.400	2.91	95.2
B	4.43	0.423	0.475	5.33	47.6
C	4.80	0.307	0.433	6.94	85
Mean <u>+</u>	4.67	0.368	0.436	5.06	74.8
Standard Dev.	0.21	0.058	0.038	2.03	57.8
24-30 cm A	4.53	0.668	0.617	3.39	37.4
B	4.41	0.523	0.595	2.74	37.4
C	4.62	0.269	0.292	4.05	47.6
Mean <u>+</u>	4.52	0.487	0.501	3.40	40.8
Standard Dev.	0.11	0.202	0.182	0.655	6.8

# Soil Mineral Analyses

# % Composition by Mineral Classes

#### Mineral Abbreviations

Montmorillonite Gibbsite М G Illite Qtz **Ouartz** Chlorite Plag Plagioclase Ch Calcite Kaolinite Ca 1 Kspar Potassium feldspar Talc % Composition by Size Classes

% Organic Matter vs Mineral

Technique - Samples were aliquotes of composites from soil cores at depths of 30 - 32 cm. Samples were composited as for nutrient analyses. Samples were anlyzed for size distribution of the particles by standard techniques for particles of sizes over 0.5 um in diameter (Folk, R. L. (1961). Petrology of Sedimentary Rocks, Hemphills, Austin, Texas. Oxidizable organic matter was determined by loss of dry weight upon oxidation with 30% hydrogen peroxide (Pierce, J. W.; Nelson, D. D.; and Colquhoun, D. J. (1972). In Shelf Sediment Transport, Ed. by Swift, Duane, and Pilkey. Dowden, Hutchinson, and Ross; Straoudsburg, Pa. Mineral composition was determined on the residues from pp. 281-306). soil samples after oxidation of organic matter with 30% hydrogen peroxide (Pierce, J. W.; Nelson, D. D.; and Colquhoun, D. J. (1972), in Swift, Duane, and Pilkey (Eds.) Shelf Sediment Transport, Dowden, Hutchinson, and Ross, Stroudsburg, Pa. p. 281-306. Mineral composition was determined by X-ray diffraction according to Jackson, M. L. (1956), Soil Chemical Analysis: Advanced Course, published by the author, Department Soil Section, University of Wisconsin, Madison, 894 p. Diffractometer scans were from 4° to 34° 2theta with Ni-filtered, Cu Kalpha radiation on

glycolated and heat-treated samples (Carroll, D. (1970), <u>Clay Minerals</u>:

<u>A Guide to their X-ray Identification</u>, Geol. Soc. Amer., Spec. Paper 126.

<u>Principal Investigator</u>: Jack W. Pierce, Department of Paleobiology,

National Museum of Natural History, Smithsonian Institution.

<u>Research Funding</u>: Smithsonian Research Foundation and the Program for

Research Applied to National Needs of the National Science Foundation.

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Percent Mineral Composition as Done by X-Ray Defraction

Sample	M		Ch	К	G	Qtz_	Kspar	Plag Cal
1A <62um < 2um	14 5.4	7 5.4	6 5.4	17 14	4.5	47 49	4.5	0 7 7
1B <62um	15	8	9	6	2	56	2	2
< 2um	34	5	6	4	4	41	4	2
1C <62um	5	4	17	8	3	54	6	3
< 2um	15	10	10	6.5	.8	48	6.5	3.2
2A <62um < 2um	36 47	9	0	15 17	0 4	33 20	1	6 0
2B <62um	36	9	7	12	4	4	24	4
< 2um	27	5	6	22	6	26	5	3
2C <62um	36	9	4	9	2	30	6	4
< 2um	25	10	11	9	0	38	7	0
3A <62um	9	3	3	5	0	67	11	2
< 2um	29	12	3	20	2	34	0	0
3B <62um	37	9	6	23	0	25	0	0
< 2um	32	7	4	13	0	41	0	0 3
3C <62um	19	7	4	7	0	47	10	6
< 2um	30	9	0	24	0	26	7	4
4A <62um	31	5	4	9	3	42	3	3
< 2um	37	9	4	10	5	34	0	0
4B <62um	44	9	2	9	0	33	3	2
< 2um	40	10	3	11	4	32	0	0
4C <62um	34	5	3	7	4	38	7	2
< 2um	56	13	3		0	18	0	0
6A < 62um	20	8	3	9	0	46	10	4
< 2um	44	8	3	13	0	32	0	0
6B <62um	30	7	7	19	0	30	4	3
< 2um	36	10	5	21	5	23	0	0
6C <62um	31	9	5	9	2	29	6	10
< 2um	34	9	6	21	4	25	2	0

Percent Mineral Composition as Done by X-Ray Defraction

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Sample	M	I	Ch	К	G	Qtz	Kspar	Plag	Ţ
5Α<62 <sub>μ</sub>	43	8	4	4.5	3	31	4	2.5	0
<2 <sub>µ</sub>	57	11	4	8	4	13	3	0	0
5B<62μ	35	12	7	12	5	29	0	0	0
<2 <sub>\mu</sub>	50.5	22	3	8	3	13.5	0	0	0
5C<62μ	14	10	3	2	0	68	1	1	1
<2 <sub>\mu</sub>	55	11	5	9	0	20	0	0	0
7A<62 <sub>µ</sub>	46	24	2	7	0	21	0	0	0
<2 <sub>µ</sub>	63	20	0	5	0	12	0	0	0
$7B < 62\mu$	62	6	0	9	0	23	0	0	0
$<2\mu$	76	9	2	4	0	9	0	0	0
7C<62μ	40	12	1	2.5	0	37	4	2.5	0
<2 <sub>\mu</sub>	61	20	1	3	0	15	0	0	0
8A<62μ	65	10	1.5	3	0	17	2	1.5	0
<2 <sub>\mu</sub>	61	10	0	9.5	0	13	6.5	0	0
8B<62μ	60	4.5	0	3.5	0	28	2	2	0
<2 <sub>\mu</sub>	61	7	3	8	0	13	5	3	0
8C<62μ	57	12.5	1.5	3	0	21	3.5	1.5	0
$<2_{\mu}$	56	16.5	3	9	0	11	4.5		0

Grain Size

# Percent of Total

<u>Sample</u>	Sand	Silt	<u>Clay</u>
1A	23.3%	43.6%	33.1%
1B	26 %	39 %	35 %
10	43 %	29 %	28 %
2A .	51 %	30 %	19 %
2B	31.8%	52.6%	15.6%
2C	47.5%	41.3%	11.2%
3A	44.8%	29.1%	26.1%
3B	27.4%	36.3%	36.3%
3C	43.3%	30.4%	26.3%
4A	31.6%	45.5%	22.9%
4B	34.5%	36.2%	29.3%
4C	51 %	25 %	24 %
6A	41.2%	31.4%	27.4%
6B	50.3%	29.0%	20.7%
6C	40.3%	31.2%	28.5%

Grain Size

# Percent of Total

Sample	Sand	Silt	Clay
5A	37%	46%	17%
5B	31%	46%	23%
5C	42%	44%	14%
7A	43%	41%	16%
7B	. 37%	44%	19%
7C	50%	35%	15%
8A	15%	68%	17%
8B	39%	44%	17%
8C	54%	34%	12%

Clay 2
Percent Organics and Non-oxidized

Sample	% Organics	% Non-oxidized
1A	17%	83%
18	22%	78%
10	9%	91%
2A .	5%	95%
2B	5%	95%
2C	8%	92%
3A	.2%	99 <b>.</b> 8%
3B	2%	98%
3C	.8%	99.2%
4A	18%	82%
4B	3%	97%
4C	4%	96%
6A	2%	98%
6B	3%	97%
6C	1%	99%

Clay <2µ Percent organics and non-oxidized

Sample	% Organics	<pre>% Non-oxidized</pre>
5A	5%	95%
5B	6%	94%
5C	5%	95%
7A	9%	91%
<b>7</b> B	. 3%	97%
7C	3%	97%
8A	7%	93%
8B	3%	97%
80	6%	94%

Major Cations of Forest Soils (by atomic absorption)
K, Ca, Mg, Na (ug/g dry wt)

Technique - Samples were composited from ten cores at each site, one core having been taken at each litter box (see Forest Ecology site map). Accurately weight 0.1 g of oven-dried composite soil sample into a 30 ml micro-Kjeldhl flask. Add 5 ml of concentrated nitric acid and boil gently until the solution is about 2 ml, cool the Kjeldhl flask and add 10 ml of distilled water and again boil down to about 2 ml. The solution was then diluted to 50 ml with distilled water in a volumetric flask. Aliquots of this solution are subjected to atomic absorption analysis. A Jarrel Ash 82-500 atomic absorption spectrophotometer was used. Concentrations reported have been corrected for efficiency of analysis. Soil samples were the same samples, as were analyzed for pH and nutrients. Principal Investigator: Tung-Lin Wu, Chesapeake Bay Center for Environmental Studies, Smithsonian Institution.

Research Funding: Program for Research Applied to National Needs of the National Science Foundation and the Smithsonian Institution.

Forest Soils - Potassium Concentrations (ug/g dry wt)

				Depth (cm)	cm)			
Site	Litter	0-3	3-5	2-8	8-12	12-18	18-24	24-30
_	1431	462	413	324	430	428	544	380
2	813	424	412	322	464	367	524	109
က	3822	1257	1103	987	914	687	725	860
4	3148	612	570	692	889	1067	762	935
2	4711	625	414	593	491	604	548	977
9	3962	571	824	899	840	616	1144	790
7	4232	2883	2569	3012	2380	2034	2889	1646
$\infty$	1160	991	830	1245	935	822	704	907

 $\infty$ 

Forest Soils - Magnesium Concentrations (ug/g dry wt)

Depth (cm)

Site	Litter	r 0-3	3-5	2-8	8-12	12-18	18-24	24-30
<del> </del>	1216	826	1056	930	1164	1343	2080	1635
2	1227	1379	2196	924	37.0	966	1448	1724
က	2440	2487	2259	2200	2330	1677	1552	1848
4	1663	1416	1498	1474	1395	2039	1494	1723
2	2459	1792	1187	1487	1503	1783	1454	1577
9-	2047	1526	1611	1754	1606	1470	1865	1849
7	2859	2397	5705	2726	2196	2218	3030	6775
8	1001	1697	1883	2115	2056	2355	1683	1851

Forest Soils - Sodium Concentrations (ug/g dry wt)

Depth (cm)

24-30	76.5	pu	36.3	235	86.7	pu	171	nd
18-24	130	pu	31.5	32.2	30.8	pu	54.1	29.7
12-18	29	pu	pu	pu	pu	33.8	135	34.6
8-12	180	pu	76.3	pu	38.8	pu	142	31.5
5-8	203	40.8	62.9	pu	37.6	pu	169	35
3-5	237	16.2	143	pu	pu	37.9	175	pu
0-3	193	42.9	6.68	34.4	pu	nd	114	pu
Litter	581	704	357	93.7	408	85.6	203	48.6
Site	-	2	က	4	гO	9	7	œ

nd - less than 15 ug/g dry wt.

Forest Soils - Calcium Concentrations (ug/g dry wt)

Depth (cm)

24-30	9	QN	ND	QN	QN	QN	QN	QN
18-24	QN	QN	ND	ND	QŅ	ND	155	ON
12-18	QN Q	ND	3840	ND	ND	QN	178	QN
8-12	Q	QN	1921	ND	N	NO	338	Q.
2-8	Q.	QN	1660	QN	QN	ND	ND	ON
3-5	ND	ND	2980	Q.	N	ON	444	ON
0-3	N	S	3390	ND	GN	QN	652	ND
Litter	20800	13100	25000	11700	18100	15200	6490	827
Site	_	2	m	4	വ	9	7	œ

Precision Data on Liter Samples

Concentrations Found (ug/g dry wt)

amples I II III andard deviation	4685.0 44 4153.0 53 4237.8 55 4358.5 51	Ca 4485.6 5373.7 5518.0 5125.8 559.1	Mg 2500.6 2167.7 3567.6 2745.3	Na 179.6 179.7 315.1 164.8
	10	01	30	20

\* Site 7 liter samples were used.

\*
Precision Data on Soils Samples

Concentrations Found (ug/g dry wt)

	105.9	237.9	134.5	66.69	137.1	72.2	50
	1310.9	5351.8	4654.7	2602.4	3480.0	1858.2	50
	42.0	99.1	89.7	0	57.7	45.9	80
	2954.6	ı	2087.9		2521.2	612.8	20
Samples	П	II	III	VI	Average	Standard deviation	Coefficient of variation %

\* Site 7 soil samples of 3-5 cm.

Analysis of Sediment and Soil Samples by Electron Microprobe

Sampling - Soil samples are collected from Forest Ecology site 2, these are composite soil samples prepared by Joe Miklas. The bottom sediment samples were collected June 17, 1974. The bottom sediment samples were taken up with an Eckman dredge, top 3 cm are taken as "surface" bottom sediment samples, and 3 - 8 cm are taken as samples from that depth. Sample preparation - All samples are air-dried for about 4 weeks at room temperature. Weigh accurately 0.200 g of dried sample and add exactly three times of the weight of flux material. The flux material is made by mixing 38 g of lithium tetraborate, 29.6 g of lithium carbonate and 13.2 g of Lanthanum oxide, the mixture is then fused at  $1010^{\circ}$  C and reground to 100 mesh. Sample and flux are mixed well and transferred into graphite crucible and fused at  $1010^{0}$  C for 20 minutes. The fused sample is cooled and the bead formed is sawed into two halves. The surface is ground, polished, and mounted into discs for microprobe analysis. The sample preparation and microprobe analysis is a routine procedure of the Department of Mineral Science, Smithsonian Institution. Detailed information can be obtained for the analytical procedure. Principal Investigator: Tung Lin Wu, Chesapeake Bay Center for Environmental Studies.

<u>Research Funding</u>: Program for Research Applied to National Needs of the National Science Foundation.

Oxide Table of Forest Soil Samples at Site 2

% Volatile	24.494		14.544	6.249	5.137		3,338	4.474
Total (%)	75.506		85.456	93.751	94.863		96.662	95.526
MnO	.040	1	0.84	.057	.040		.058	950.
Ti02	.162	ı	.921	.922	926.	,	1.056	1.091
Na <sub>2</sub> 0	. 589	,	.462	.452	.432	,	.452	.451
K20	1.225	1	1.510	1.618	1.719		1.952	1.909
Ca0	4.027	ı	.157	.196	.146		.170	.169
MgO	1.347	1	.375	.504	.420		099.	. 582
Fe0	.921	ı	2.766	2.989	2.966	ı	3.558	3.770
A1203	57.795	,	8.217	8.106	8.260	ı	10.356	10.738
Depth Si02 Al203	9,399	i	70.964	78.906	49.903	1	78.400	76.760
Depth	Litter	0 - 3 cm	3 - 5 cm	5 - 8 cm	8 -12 cm	12-18 cm	18-24 cm	24-30 cm

- Sample lost

# Litter Box Data from Forest Ecology Intensive Study Sites

Technique - Litter boxes were constructed with sides of braced 1" x 12" pine boards such that they were 1 meter by 1 meter from center to center as seen from above. The wood was treated with Cuprinol preservative and the bottom was covered with fiber glass window screening. The boxes were distributed as shown in the forest ecology site map, 10 per site on an evenly spaced grid. Litter was collected at weekly to monthly intervals, depending on the season beginning in the summer of 1974. Leaves and seeds were sorted by species where possible, counted and weighed after drying to constant weight at 60° C. Leaf areas were measured with an area meter under a light table with diffuse even lighting. The meters had selenium photodiode cells, type A, of various sizes connected in parallel to a ten turn resister pot and to an amperage meter. The meter was first adjusted to give full scale deflection when the surface of the photocell was not obstructed, then the decrease in reading was measured when a leaf was placed over the photocell surface. Only dry weight was measured on other miscellaneous litter (bark, twigs, etc.).

<u>Principal Investigator</u>: David L. Correll, Radiation Biology Laboratory, Smithsonian Institution.

Research Funding: Smithsonian Fluid Research Fund.

# Dates of Initiation of Litter Study for Each Site

<u>Site Number</u>	Dates
1	July 16
2	July 17
3	July 25
4	July 19
- 5	August 20
6	July 25
7	August 22
8	July 31

## Forest Ecology Study

### Species List

## GYMNOSPERMAE

Pinaceae

Pinus virginiana Pinus taeda Virginia pine Loblolly pine

Cupressaceae

Juniperus virginiana

Virginia red cedar

**ANGIOSPERMAE** 

Monocotyledoneae Dicotyledoneae

Salicaceae

Salix nigra

Black willow

Juglandaceae

Juglans nigra

Black walnut

Betulaceae

Carya globra Carya tomentosa Carpinus carolena Betula lutea Ostrya virginiana Pignut hickory
Mockernut hickory
American hornbeam
Yellow birch
Ironwood

Fagaceae

Castanea dentata
Quercus velutina
Quercus stellata
Quercus falcata
Quercus alba
Quercus palustris
Quercus marilandica
Quercus Muehlenbergii
Quercus prinus
Quercus rubra
Quercus phellos

Chestnut
Black oak
Post oak
Southern red oak
White oak
Pin oak
Black jack oak
Yellow oak
Chestnut oak
Red oak
Willow oak
Beech
Scarlet oak

Ulmaceae

Ulmus americana

Fagus grandifolia

Quercus coccinea

American elm

Magnoliaceae

Liriodendron

Tulip tree

Lauraceae

Sassafras albidum

Sassafras

Liquidambar

Styraciflua

Sweet gum

Platanaceae

Platanus occidentalis

Sycamore

Rosaceae

Prunus cerasus
Prunus serotina
Prunus avium
Prunus virginiana
Amelanchier arborea
Fraxinus pennsylvanica

Sour cherry
Black cherry
Sweet cherry
Choke cherry
Service-berry
Red ash

Leguminosae

Robinea pseudo-acacia

Black locust

Simaroubaceae

Ailanthus altissima

Tree of heaven

Aquilifoliaceae

Ilex opaca

American holly

Aceraceae

Acer rubrum Acer negundo

Red maple Box elder

Nyssaceae

Nyssa sylvatica

Tupelo (Sour gum)

Cornaceae

Cornus florida

Dogwood

Ebenaceae

Diospyros virginiana

Persimmon

Forest Ecology Litter Box Data - 1974

Seeds

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
204	2 7	Oaks Oaks	3 4	1.3
205	16	Oaks	11	1.3
	17	Oaks	2	0.5
207	31	Oaks	8	1.5
	32	Hickories	2	0.6
	33	Oaks	8	1.5
	34	Oaks	3	0.4
	35	Beech	5	3.0
	37	Oaks	6	0.7
211	2	Oaks	2	0.2
	6	Oaks	1	0.5
	7	Oaks	1	0.7
	9	Oaks	3	0.6
212	16 19	Oaks Oaks	8	0.8 0.6
213	31	Oaks	3	0.3
	32	Beech	1	0.2
	32	Oaks	2	0.3
	33	Oaks	5	0.9
	34	Oaks	3	0.3
	35	Beech	1	1.1
	37	Oaks	5	0.9
	37	Beech	3	0.9
218	4	Oaks	10	1.6
	7	Oaks	10	3.3
	15	Oaks	1	0.3
	16	Oaks	9	1.2
	17	Oaks	6	1.0
	18	Dogwood	1	0.1
	18	Oaks	2	0.2

In the case of sweet gum, black locust, and persimmon the number and weight of receptacles or fruits, rather than reproductive seeds were recorded.

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
219	31 31 33 33 35 37 37 37 38 40	Beech Oaks Beech Oaks Beech Oaks Beech Oaks Beech	1 8 1 5 5 4 2 2 1	0.1 1.7 0.2 1.1 2.5 0.6 0.7 1.7 0.4
220	22 29 52 9 9	Black Locust Black Locust Dogwood Oaks Tupelo	1 1 1 14 3	0.05 0.10 0.03 3.2 2.0
226	15 17	Sweet Gum Oaks	1 2	2.2 0.4
227	31 35 37	Oaks Beech Oaks	1 1 10	0.1 0.3 2.5
228	25 <sup>2</sup> 26 <sup>2</sup> 30 <sup>2</sup>	=	- - -	0.02 0.9 0.7
232	32 72 9 92 41 <sup>2</sup>	- Tupelo - -	- - - - -	2.8 0.1 0.1 0.4 1.0
234	13 31 33 35 37 38 77 <sup>2</sup>	Tulip Poplar Oaks Oaks Beech Oaks -	1 - - - - -	0.4 0.4 0.55 0.65 2.9 0.5 0.7

<sup>2</sup> Species and number of fruits/seeds were not recorded.

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
235	22 <sup>2</sup> 23 <sup>2</sup> 25 <sup>2</sup> 26 <sup>2</sup> 29 <sup>2</sup> 60	- - - - Tulip Poplar	- - - - -	1.7 1.0 0.2 17.2 1.0 0.4
239	62 92 10 <sub>2</sub> 412 452 462 492 50	- - 0aks - - - -		0.4 1.2 1.1 12.6 0.4 0.2 0.5 1.3
241	11 <sup>2</sup> 12 <sup>2</sup> 13 16 <sup>2</sup> 20 <sup>2</sup>	- - Tulip Poplar - -	- - - -	2.3 2.6 1.3 1.0 0.3
24.2	22 <sup>2</sup> 27 <sup>2</sup> 30	- - Oaks	- - -	0.7 0.7 0.7
246	3 7 <sub>2</sub> 92 102 412 492	Oaks Oaks - - -	- - - - -	2.9 0.5 2.6 0.7 0.65 0.4
247	32 <sup>2</sup> 33 <sup>2</sup> 34 <sup>2</sup> 35 <sup>2</sup> 37	- - - - Oaks	- - - -	1.0 0.6 0.9 3.9 0.25 0.3
248	12 <sup>2</sup> 14 16 17 62 <sup>2</sup> 66 <sup>2</sup>	- Oaks Oaks - -	- - - - -	3.45 0.65 1.5 3.6 3.1 1.1

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Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of 1 Seeds	Dry Weight (g)
249	21 <sup>2</sup> 22 <sup>2</sup> 23 <sup>2</sup> 25 <sup>2</sup> 26 <sup>2</sup> 27 <sup>2</sup> 29 <sup>2</sup> 30 <sup>2</sup> 52 <sup>2</sup>	- - - - - -	- - - - - - -	0.4 0.7 0.4 0.35 0.37 0.2 1.7 0.2 0.2
253	3 <sup>2</sup> 52 82 92 102 412 452 492 50		- - - - - - -	7.7 0.4 2.4 1.05 0.5 3.55 0.01 1.2 0.86
254	33 37 <sup>2</sup>	0aks -	-	1.0 11.15
255	12 <sup>2</sup> 132 142 162 172 182 192 622 642 66	-	- - - - - - -	1.65 1.5 1.75 1.85 0.4 1.8 3.9 7.6 0.3 1.55
256	21 <sup>2</sup> 26 30 <sup>2</sup> 55	- - Persimmon	- - -	0.3 0.3 0.3 8.1
260	2 <sup>2</sup> 3 <sup>2</sup> 4 <sup>2</sup> 5 <sup>2</sup> 6 <sup>2</sup>	-	- - -	1.6 3.5 1.1 2.6 1.6

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
260	7 <sup>2</sup> 82 92 102 412 45 492	-	- - - - - -	1.0 1.1 2.1 2.05 1.75 0.3 0.6
261	35 <sup>2</sup> 37 <sup>2</sup>	-	Ξ	0.5 2.4
262	12 <sup>2</sup> 13 <sup>2</sup> 14 <sup>2</sup> 16 <sup>2</sup> 17 <sup>2</sup> 61 62 <sup>2</sup> 64 <sup>2</sup> 66 <sup>2</sup>	- - - - Persimmon - -	- - - - - - -	1.1 0.5 1.9 0.4 2.45 2.35 7.4 0.15 2.55
263	30 <sup>2</sup> 53	- Persimmon	, <del>-</del> -	0.3 43.8
267	3 <sup>2</sup> 5 <sup>2</sup> 9 <sup>2</sup> 10 <sup>2</sup>	- - -	- - -	3.6 1.8 5.9 1.25
268	32 <sup>2</sup> 35 <sup>2</sup> 37 <sup>2</sup> 38 <sup>2</sup> 77 <sup>2</sup>	- - - -	- - - - -	3.55 1.1 1.8 5.1 0.9
269	14 <sup>2</sup> 15 <sup>2</sup> 16 <sup>2</sup> 17 <sup>2</sup> 62 <sup>2</sup>	- - - -		4.75 1.7 2.2 1.3 4.65
270	21 <sup>2</sup> 22 <sup>2</sup> 23 <sup>2</sup> 25 <sup>2</sup>	-	=	0.85 0.65 0.3 0.9

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
270	27 <sup>2</sup> 28 <sup>2</sup> 29 <sup>2</sup> 55	- - Persimmon	-	0.6 0.7 0.6 27.47
274	6 7 8 9 10	Oaks Oaks Oaks Oaks Oaks	  	4.0 3.2 1.4 10.0 4.0
275	32 35 37 38 40 77 <sup>2</sup>	Beech Beech Beech Oaks Beech	  	1.5 2.7 0.8 9.65 0.65 0.15
276	11 14 15 16 18 61 62	Tulip Poplar Oaks Sweet Gum Oaks Oaks Persimmon Oaks	4 4 - 6 2 1	0.1 2.6 5.3 2.4 1.4 4.1 6.1
277	21 22 25 27 28 29 55 60	Black Locust Black Locust Black Locust Black Locust Black Locust Black Locust Persimmon Tulip Poplar	23 6 11 8 4 13 -	2.3 0.7 1.25 0.9 0.5 1.55 52.3
281	2 6 8 9 10	Oaks Oaks Oaks Oaks Oaks	- - - -	5.75 3.2 3.1 5.3 2.0
282	32 33 34 35	Beech Beech Beech Beech	-	4.9 1.2 0.65 3.8

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of 1 Seeds	Dry Weight (g)
282	37 38 38 40	Beech Beech Oaks Beech	- - -	0.6 0.4 1.65 1.2
283	14	Oaks	-	1.35
	17	Oaks	-	1.2
	20	Persimmon	9	7.1
	20	Oaks	6	1.9
284	21 55	Black Locust Persimmon	4 2	0.2 10.2
288	2	Oaks	4	9.55
	6	Oaks	7	12.6
	9	Oaks	12	9.55
	10	Oaks	3	7.3
289	31 32 33 35 37 39 40 77	Beech Beech Beech Beech Oaks Beech Oaks	1 18 2 25 1 4 3 2	0.5 14.4 0.5 11.8 0.45 11.6 2.5 0.45
290	13	Tulip Poplar	-	3.3
	14	Oaks	1	2.0
	16	Oaks	6	3.2
	17	Oaks	7	3.85
	18	Dogwood	5	0.7
	61	Persimmon	3	8.3
	62	Oaks	14	3.3
291	21	Black Locust	3	0.1
	23	Black Locust	3	0.5
	55	Persimmon	3	7.4
296	32	Beech	24	14.4
	34	Beech	5	1.05
	35	Beech	4	6.1
	37	Beech	3	1.7
	38	Beech	4	2.05
	40	Beech	3	1.85

Forest Ecology Litter Box Data - 1974

Seeds

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
297	11 13 61 62	Tulip Poplar Tulip Poplar Persimmon Oaks	- 22 2 4	0.3 0.7 4.0 0.7
298	21 25 29	Black Locust Black Locust Black Locust	5 1 2	1.0 0.5 0.1
303	31 32 33 34 34 35 35 36 37 38 40 40	Beech Tulip Poplar Beech Beech Tulip Poplar Beech Tulip Poplar Tulip Poplar Tulip Poplar Beech Tulip Poplar Beech Tulip Poplar	2 8 34 2 4 21 3 14 65 2 6 13 5	2.3 0.3 19.0 1.4 1.9 0.5 6.1 0.4 1.7 0.7 2.4 0.3 1.7
304	11 12 13 61	Tulip Poplar Tulip Poplar Tulip Poplar Persimmon	45 48 458 2	1.1 1.0 22.7 3.2
305	60	Tulip Poplar	37	1.4
309	48	Tulip Poplar	18	0.45
310	31 32 32 33 33 34 34 35 35 35 36 37	Beech Tulip Poplar Tulip Poplar Beech	1 29 12 40 2 43 12 38 6 28 124 6	0.35 0.7 5.3 1.0 1.0 2.5 0.8 3.35 0.6 3.0 2.3

Forest Ecology Litter Box Data - 1974

Seeds

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
310	37	Tulip Poplar	50	1.3
	38	Beech	12	6.0
	40	Beech	4	2.0
	40	Tulip Poplar	22	0.55
311	11	Tulip Poplar	171	3.8
	12	Tulip Poplar	225	5.5
	13	Tulip Poplar	605	25.9
	16	Sweet Gum	1	2.2
	65	Tulip Poplar	16	0.45
312	25	Tulip Poplar	16	0.4
	29	Black Locust	7	0.85
	53	Tulip Poplar	11	0.35
	55	Persimmon	2	11.7
	60	Tulip Poplar	25	0.9
316	41	Tulip Poplar	19	0.7
	50	Tulip Poplar	9	0.4
317	31 32 32 33 33 34 35 35 36 37 38 38 39 40 77	Tulip Poplar Beech Tulip Poplar Beech Tulip Poplar Tulip Poplar Beech Tulip Poplar	43 5 68 1 130 61 1 35 133 - 2 93 84 28 5	1.0 1.65 1.7 0.25 3.1 1.35 0.5 0.75 3.0 1.25 0.9 2.2 1.7 0.75 0.3
318	11 12 13 14 15 15 16 61	Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar Sweet Gum Tulip Poplar Tulip Poplar Tulip Poplar Persimmon	218 340 257 75 1 18 10	4.9 7.7 5.9 1.6 1.7 0.4 0.3 2.4

Day of 1974	Box Number	Species	Number of 1 Seeds	Dry Weight (g)
318	61 63 64 65	Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar	20 7 16 38	0.5 0.1 0.4 0.9
319	22 29 55 57 59 60	Black Locust Black Locust Persimmon Tulip Poplar Tulip Poplar Tulip Poplar	2 4 1 18 9 23	0.4 0.35 3.2 0.8 0.3 0.9
323	41 42 43 44 45 46 48 49 50	Tulip Poplar	46 26 71 13 49 16 64 14	1.3 0.65 2.0 0.4 1.3 0.5 1.9 0.45 0.9
324	31 32 33 34 34 35 35 36 37 38 39 40 40 72 73 74 75 76 77 77 78 79 80	Tulip Poplar Beech Tulip Poplar Beech Tulip Poplar Beech Tulip Poplar Beech Tulip Poplar	74 1 74 183 2 115 3 30 79 116 83 87 2 73 17 21 36 12 21 44 28 18 25 29	1.85 0.3 2.6 6.25 0.4 3.1 1.55 0.6 1.8 3.3 2.2 2.2 0.8 2.0 0.6 0.7 1.2 0.5 0.6 1.4 0.8 0.6

Forest Ecology Litter Box Data - 1974

Seeds

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
325	61 62 63 65 67 69 70	Tulip Poplar	14 17 18 33 18 8	0.5 0.4 0.4 1.0 0.5 0.2
326	21 22 23 25 25 27 28 29 30 51 55 56 59	Black Locust Black Locust Black Locust Tulip Poplar Black Locust Black Locust Black Locust Black Locust Tulip Poplar Persimmon Tulip Poplar Tulip Poplar	6 5 4 23 4 5 3 6 2 12 1 8 23 21	0.95 0.9 0.5 0.85 0.5 1.0 0.9 0.25 0.45 4.8 0.2 1.0 0.8
330	42 43 45 46 47 48 49 50	Tulip Poplar Sweet Gum Sweet Gum	32 24 93 19 13 22 1	0.85 0.6 2.4 0.5 0.4 0.6 4.1 1.85
331	31 31 32 33 34 35 37 38 39 39 71 74	Beech Tulip Poplar Sweet Gum Tulip Poplar Tulip Poplar Beech Tulip Poplar Beech Beech Tulip Poplar Tulip Poplar Tulip Poplar	3 12 4 22 42 4 20 9 1 17 30 45	0.8 0.3 9.5 0.5 1.1 0.9 0.4 0.4 2.9 0.4 1.0

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
331	75 77 78 80	Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar	14 102 33 62	0.5 3.35 1.35 2.25
332	11 23 13 14 14 17 61 62 63 64 65 66 67 68 70	Tulip Poplar Tulip Poplar Tulip Poplar Beech Tulip Poplar Sweet Gum Tulip Poplar	182 261 242 4 71 1 72 43 44 42 34 15 1 20 13	4.6 6.9 6.1 1.3 1.9 3.1 1.1 1.1 1.1 0.5 2.0 0.5 0.5
333	30 60	Black Locust Sweet Gum	4 1	0.4 2.7
337	49 50	Tulip Poplar Box Elder	1	-
338	32 33 34 35 37 38 39 39 40 40 80	Beech Beech Beech Sweet Gum Beech Tulip Poplar Tulip Poplar Beech Beech Tulip Poplar	4 3 - 1 2 36 27 3 8 42 15	0.8 0.5 0.6 2.9 0.7 0.9 0.7 1.0 5.4 1.3 0.6
339	11 12 12 12 13 13	Tulip Poplar White Oak Tulip Poplar Sweet Gum Tulip Poplar Beech	78 - 90 1 90 4	1.9 1.4 2.3 2.3 2.2 1.2

Forest Ecology Litter Box Data - 1974

Seeds

Day of 1974	Box Number	Species	Number of Seeds	Dry Weight (g)
339	14 14 15 15 16 16 17 17 18 19 20 20 62 63 70	Tulip Poplar Beech Sweet Gum Tulip Poplar Sweet Gum Tulip Poplar Sweet Gum Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar Sweet Gum Tulip Poplar Sweet Gum Tulip Poplar Sweet Gum Tulip Poplar Sweet Gum Sweet Gum	27 1 48 3 21 3 41 30 27 1 11 2 26 1	0.7 0.1 2.3 1.6 6.6 1.0 5.4 1.3 1.0 0.7 3.2 0.3 4.6 0.7 2.5
340	21 22 26 28 29	Black Locust Black Locust Black Locust Black Locust Black Locust	10 13 9 8 3	1.8 2.4 1.4 1.3 0.7
344	46	Sweet Gum	1	1.9
351	9 13 17 17 32 36 40 72 73 74	Tulip Poplar Tulip Poplar Sweet Gum Tulip Poplar Sweet Gum Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar	1 - - 13 1 4 3 17 14 12	0.0 0.7 1.8 0.3 1.6 0.2 0.1 0.5 0.7

In the case of sweet gum, black locust, and persimmon the number and weight of receptacles or fruits, rather than reproductive seeds were recorded.

<sup>&</sup>lt;sup>2</sup> Species and number of fruits/seeds were not recorded.

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
351	76 76 77 77 78 78	Tulip Poplar Ash Tulip Poplar Black Locust Black Locust Ash	8 7 14 1 13 4	0.4 0.2 0.7 0.1 0.5 0.2
358	1 2 6 11 12 13 14 16 16 17 20 20 25 27 28 29 31 31 32 32 32 32 33 33 34 35 36 37 38 39 40 40 40 40 40 40 40 40 40 40 40 40 40	Beech Tulip Poplar Black Locust Black Locust Black Locust Black Locust Black Locust Coust Black Locust Coust Co	1 1 1 42 31 33 18 4 2 1 7 6 1 1 3 1 2 2 24 10 - - - 9 1 7 7 7 7 7 7 7 7 7 7	0.1 0.0 0.9 0.6 0.8 0.4 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.4 0.2 0.2 0.2 0.3 0.5 0.5 0.5 0.5 0.5 0.1 0.5 0.1 0.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Seeds <sup>1</sup>	Dry Weight (g)
358	48 48 50 50 51 57 58 69 59	Tulip Poplar Beech Beech Tulip Poplar Beech Tulip Poplar	5 4 1 5 4 3 2 8 1 5	0.3 0.2 0.1 0.2 0.2 0.1 0.1 0.4 0.1
	63 63 67 68 70 71 71 72 72	Tulip Poplar Ash Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar Tulip Poplar Ash Tulip Poplar	.27 1 5 23 7 44 14 22	0.4 0.0 0.2 0.4 0.2 1.2 0.4 0.7
·	72 73 74 74 75 75 75	Ash Tulip Poplar Ash Tulip Poplar Ash Ash Tulip Poplar Black Locust	6 27 2 20 48 5 12	0.2 0.7 0.1 0.6 1.3 0.2 0.4 0.1
	76 77 78 78 79 80 80	Tulip Poplar Tulip Poplar Ash Tulip Poplar Tulip Poplar Tulip Poplar Ash	18 22 18 38 10 10	0.7 0.8 0.7 1.2 0.4 0.3 0.2
365	4 11 12 13 15 17 18 19 28 32	Beech Tulip Poplar Sweet Gum Tulip Poplar Tulip Poplar Tulip Poplar Sweet Gum Sweet Gum Tulip Poplar Black Locust Sweet Gum	1 10 4 13 44 11 2 - 3 1	0.2 0.6 0.0 0.3 1.2 0.4 3.8 4.7 0.1 0.2 2.4

***************************************				
			Number	Dry
Day of	Box		of 1	Weight
1974	Number	Species	Seeds	(g)
	0.0			
365	32	Tulip Poplar	3	0.1
	34	Tulip Poplar	5	0.4
	35	Beech	2	0.3
	36	Beech	1	0.3
	37	Tulip Poplar	6	0.1
	38	Tulip Poplar	8	0.3
	38	Beech	8	1.5
	39	Tulip Poplar	-	0.1
	39	Beech	-	0.4
	40	Beech	-	0.5
	41	Sweet Gum	_	1.2
	42	Tulip Poplar	4	0.1
	44	Tulip Poplar	6	0.1
	45	Tulip Poplar	3	0.1
	46	Tulip Poplar	4	0.0
	62	Sweet Gum	i	3.4
	62	Tulip Poplar	ģ	0.2
	64	Tulip Poplar	15	0.4
	72	Tulip Poplar	5	0.1
	73	Tulip Poplar	6	0.1
	77	Tulip Poplar	6	
	79		9	0.2
	13	Tulip Poplar	9	0.3

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
204	1 2 3 4 6 7 8	0.4 1.0 1.3 0.4 1.3 0.8 1.0
205	13 14 16 18 19	2.8 0.6 0.6 0.2 0.1
207	31 32 33 34 35 36 38 39	0.3 0.4 0.1 3.0 0.4 0.1 0.4 0.2
211	2 4 5 6 8 9 10 11 12	2.4 0.7 1.0 23.2 5.6 0.6 3.2 0.1 0.1
213	32 33 36 37 40	16.4 0.5 0.2 3.1 0.8
214	22 23 24	2.1 6.3 2.2

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
214	25 26 28 29	0.3 10.1 0.4 0.1
218	5 6 7 8 11 13 14 16 17	0.1 5.2 0.3 1.8 1.7 0.1 10.2 0.2 0.1
219	31 32 33 34 35 36 37 38 61 62 63 64 65 66	0.1 0.1 2.1 0.2 0.3 0.5 1.6 0.5 0.1 4.5 0.3 0.7 0.7
220	22 23 24 26 27 28 29 30 52 59	11.5 2.2 0.7 0.3 0.5 5.12 1.2 0.7 0.8 0.3



Forest Ecology Litter Box Data - 1974
(Other Miscellaneous Litter,

			us Litter,
i.e.	bark,	twigs,	etc.)

Day of 1974	Box Number	Dry Weight (g)
239	4 6 7 8 9	3.2 4.5 0.8 2.3 2.65
240	31 34 36 37 40	0.7 29.3 0.3 35.3 1.5
241	12 16 20	42.6 2.0 2.8
242	21 23 24 26 27 28 29 30 46	2.6 0.8 3.5 4.6 2.7 1.0 4.8 3.3 4.6
246	2 4 5 6 7 9 44 45 46	2.15 0.6 1.1 1.05 0.4 0.9 0.5 0.25
247	34 35 37 38	2.5 3.85 15.4 1.25

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
248	11 12 13 14 16 17 20 66 67 70	0.65 0.7 1.8 2.0 20.1 0.85 2.0 3.1 25.9 0.9
249	21 22 23 24 25 26 27 29 30 59 60	2.8 1.75 0.9 2.75 1.65 1.65 0.85 1.5 0.2 9.6 0.6
253	2 4 6 8 9 10 41 45 46 47 49 50	1.3 0.2 0.5 0.7 0.7 2.4 0.15 0.15 0.61 5.4 0.2
254	34 35 37 39	6.0 0.35 1.7 0.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
255	11 · · · · · · · · · · · · · · · · · ·	5.9 0.1 0.2 1.1 2.5 0.3 0.15 1.1 0.1
256	21 22 23 24 25 26 29 55 59	0.3 0.85 0.8 1.3 2.9 1.6 0.3 0.2
260	2 3 6 8 9 41 48 50	0.1 10.0 28.2 1.5 1.2 0.3 0.1
261	32 35 39	0.6 0.3 1.1
262	11 15 19 66 67	0.2 0.3 0.85 0.45 5.0

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
262	21 22 24 25 26 27 30 59	0.4 3.3 1.3 0.75 0.4 0.7 0.5 0.5
267	2 3 4 5 6 7 8 9 10 41 42 45 48 49 50	4.7 1.3 0.8 5.0 20.0 3.0 1.6 4.5 0.4 0.6 0.7 1.6 1.7
268	31 32 35 36 38 39 40	2.9 0.35 2.2 6.4 0.7 1.0 6.6
269	11 13 14 16 64 67	0.2 5.7 2.5 1.25 10.5 7.9
270	21 22 23 24	0.4 7.6 3.65 7.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
270	25 26 27 29 30 55 60	25.8 1.0 4.4 0.7 0.65 0.4 1.5
274	2 4 6 8 9 10 41 42 44 47 50	4.6 0.65 1.25 1.0 2.6 1.5 0.7 1.0 1.4 1.8 0.9
275	34 35 36 37 38 39 77	66.9 11.7 0.2 386.4 5.5 2.5 0.2
276	11 12 13 14 15 16 18 20 61 64 66 67 68	1.0 13.3 1.5 2.6 3.5 13.4 0.75 0.5 2.25 13.2 11.9 18.2 1.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
277	22 24 25 26 27 28 29 30 60	2.35 59.3 1.6 1.1 1.3 2.7 0.9 1.7
281	4 9 42 45 46 47 48 50	0.9 6.7 0.55 6.6 1.5 0.35 0.85
282	34 35 39	0.35 3.8 3.35
283	14	0.9
284	21 22 24 27	1.4 0.6 2.2 0.5
288	2 6 8 10 50	1.15 2.4 1.35 1.3 0.65
289	40	1.25
290	66 67 68	0.9 7.1 0.65

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
291	21 22 24 26 27 30 59	0.6 3.6 0.85 2.0 0.65 1.4 16.55
295	2 3 8 10 50	1.4 12.1 1.7 0.85 0.55
296	31 35 38 39	0.55 1.15 1.4 0.45
297	11 12 14 15 19 67 68	1.3 1.1 3.5 26.9 1.0 7.7 2.0
298	28 60	2.0 6.6
302	2 4 5 6 9 10 47 50	0.9 0.7 4.0 4.65 3.45 9.35 0.3 1.8
303	34 37 38	0.7 0.8 4.0

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
304	11 13 14 16 18 66 67 68	19.0 0.7 3.7 5.1 6.7 1.0 12.7 3.2
305	26 29 59	0.5 0.7 0.55
309	1 3 5 7 8 9 10 50	0.55 5.9 1.35 2.45 3.4 4.35 5.75
310	33 34 35 36 37 38 39	2.65 3.0 2.7 26.1 1.05 2.05 7.55
311	11 14 16 17 19 20 66	1.4 6.8 102.8 6.5 1.4 3.15
312	24 59 60	3.55 0.9 1.3

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
316	2 3 5 6 9 10 46 49	0.9 0.85 6.1 6.15 2.45 0.7 1.6 2.0
317	37 39	4.8 0.7
318	11 14 16 19 67	24.85 4.25 3.1 0.85 1.75
319	21 27	1.6 10.7
323	2 3 6 9	0.8 2.05 12.2 2.4
324	33 38	13.6 2.3
325	11 14 61 67 68	1.9 0.9 4.5 5.2 3.0
326	24 26 27 52 59	7.9 1.4 6.0 1.1 18.8

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
330	1 2 4 6 8 9 10 41 42 44 45 46	0.9 2.1 31.4 1.3 8.25 1.7 2.6 5.7 23.55 2.7 2.15 16.0 22.2
331	31 33 36 37 38 40	5.2 4.8 13.2 1.9 3.3 1.7
332	11 12 16 18 20 67 68	7.0 1.8 3.7 5.0 7.6 10.6 1.7
333	29	5.6
337	1 2 3 5 6 7 8 9 41 43 44	8.1 22.5 26.7 23.0 20.3 10.6 1.4 3.9 1.8 31.1 20.5

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
337	45 46 47 49	136.6 38.5 3.8 17.9
338	31 32 33 35 36 37 38 39 40	15.4 23.1 11.5 20.4 3.0 37.0 4.8 20.6 15.4
339	11 12 13 14 15 16 17 18 19 20 61 64 67 68 70	16.8 35.3 91.9 22.1 5.2 13.4 63.1 12.5 8.8 3.5 8.3 19.7 116.9 8.2 3.0
340	21 22 23 24 27 28 29 30 55	9.1 3.4 23.2 18.4 13.8 16.7 32.0 5.8 41.2
344	5 7 8	1.5 2.1 3.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Dry Weight (g)
344	9 41 42	9.5 2.6 2.4
345	32	2.6
346	13 14 68 70	2.3 1.5 1.5 1.3
351	3 5 14	1.0 0.3 73.2
358	7 14 25 34 45 61	0.9 0.9 1.1 1.2 0.6 10.5
365 365	2 5 11 13 14 16 19 20 29 32 34 36 38 42 43 45 47	2.7 19.5 0.2 1.8 0.6 3.5 2.0 29.4 18.6 9.6 6.4 8.5 4.0 0.3 5.7 1.9 8.5 29.4

Forest Ecology Litter Box Data - 1974 Leaves

Day of	Box	***************************************	Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
204	1	Dogwood Spanish Oak Tupelo Misc. Frag. Total	3 6 · 1 -	78.6 101.6 19.7 32.8 232.7	0.5 1.1 0.3 0.5 2.4
204	2	Misc. Frag.	-	22.9	0.2
204	3	White Oak Misc. Frag. Total	1 - 1	32.8 26.2 59.0	0.4 0.2 0.6
204	4	Tupelo Misc. Frag. Total	5 - 5	108.3 13.1 121.4	0.9 0.2 1.1
204	5	American Holly Beech Red Maple White Oak Misc. Frag. Total	1 1 1 1 -	6.5 6.5 13.1 16.4 19.7	0.2 0.01 0.01 0.2 0.1 0.52
204	6	Spanish Oak White Oak Misc. Frag. Total	] ] 	3.3 36.0 42.6 81.9	0.01 0.8 0.01 0.82
204	7	Red Maple Spanish Oak Misc. Frag. Total	2 3 - 5	49.1 59.0 39.3 147.4	0.3 0.7 0.2 1.2
204	8	Spanish Oak Misc. Frag. Total	1 - 1	1.7 13.1 14.8	0.1 0.1 0.2
204	9	Beech White Oak Misc. Frag.	6 4 -	71.8 72.1 22.9	0.3 0.2 0.2 0.7
		Total	10	166.8	0.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
204	10	Dogwood Red Maple White Oak Misc. Frag. Total	1 2 · 1 - 4	19.7 19.7 3.3 4.9	0.1 0.01 0.3 0.01 0.42
205	11	Dogwood Red Maple Tulip Poplar Misc. Frag. Total	1 4 7 - 12	36.0 91.8 288.3 6.5 422.6	0.3 0.6 1.4 0.2
205	12	Beech Tulip Poplar Misc. Frag. Total	2 2 - 4	31.2 63.9 1.6 96.7	0.3 0.1 0.01 0.41
205	13	Tulip Poplar Misc. Frag. Total	3 - 3	58.9 19.7 78.6	0.6 0.3 0.9
205	14	Beech White Oak Misc. Frag. Total	6 4 - 10	173.6 81.9 1.6 257.1	1.2 0.6 0.01 1.81
205	15	Black Cherry Dogwood Misc. Frag. Total	3 1 - 4	32.8 16.4 13.1 62.3	0.1 0.05 0.05 0.2
205	16	Beech Hornbeam Red Maple Misc. Frag.	1 20 3 - 24	9.8 88.4 98.2 6.5 202.9	0.01 0.1 0.4 0.01 0.52
205	17	Sweet Gum	3	81.9	0.6
205	18	Red Maple Misc. Frag. Total	1 - 1	26.2 9.8 36.0	0.3 0.2 0.5

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
205	19	Chestnut Oak Sweet Gum Misc. Frag.	1	16.4 39.3 13.1	0.1 0.2 0.1
		Total	2	68.8	0.4
205	20	Dogwood Hornbeam Misc. Frag.	13 2 -	226.1 16.4 19.7	1.5 0.01 0.1
		Total	15	262.2	1.61
207	31	Beech Oak Misc. Frag.	7 1 -	122.8 16.4 6.5	0.7 0.2 0.2
		Total	8	145.7	1.1
207	32	Beech Tulip Poplar Misc. Frag.	2 1	26.2 13.1 3.3	0.1 0.01 0.01
	***	Total	3	42.6	0.12
207	33	Oak Misc. Frag.	1 	19.7 13.1	0.1
<i>:</i>		Total	1	32.8	0.3
207	34	Beech Oak Tulip Poplar Misc. Frag.	4 1 3	49.1 9.8 45.9 6.5	0.3 0.05 0.4 0.05
	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Total	8	111.3	0.03
207	35	Beech Dogwood Tulip Poplar	7 1 3	98.3 23.0 56.0	0.7 0.4 0.4
		Total	11	177.3	1.5
207	36	Beech Tulip Poplar Misc. Frag.	1 3 -	32.8 68.8 45.9	0.1 0.2 0.2
207	27	Total	4	147.5	0.5
	37	Tulip Poplar Misc. Frag. Total		49.1 9.8 58.9	0.2 0.01 0.21

			NIl	Loof Confe	D
Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
207	38	Beech	3 5	16.4	0.2
		Virginia Pine	5	-	0.01
		Misc. Frag.	8	11.8 28.2	0.1
		Total	0	20.2	0.31
207	39	Beech	- 3	62.2	1.0
		Hickory	7	91.7	1.1
		Tulip Poplar	1	16.4	0.1
		Misc. Frag.		29.5	0.5
		Total	11	199.8	2.7
207	40	Beech	2	13.1	0.01
20,	10	Tulip Poplar	2 1	19.7	0.1
		Misc. Frag.	_	6.5	0.01
		Total	3	39.3	0.12
211	1	Spanish Oak	2	72.1	0.7
211	•	Tupelo	2 5	129.4	0.7
		Misc. Frag.	_	26.2	0.2
		Total	7	227.7	1.7
017	0	0 1 0 1		06.0	0.4
211	2	Spanish Oak	1	26.2	0.4
		Misc. Frag. Total	<del></del> 1	6.5 32.7	0.2
		10001	•	JL. /	0.0
211	3	Spanish Oak	2	32.8	0.6
		Sweet Gum	2 1	26.2	0.3
		Total	3	59.0	0.9
211	4	Beech	2	12.1	0.01
211	4	Tupelo	21	455.3	3.6
		Misc. Frag.	-	45.9	0.2
		Total	23	513.3	3.81
011	_	D 1 14 7		E0. 4	0.7
211	5	Red Maple	1	52.4	0.1
		Spanish Oak Tupelo	5	58.9 262.1	0.5 1.9
		White Oak	3 6 2	160.0	0.9
		Misc. Frag.		13.1	0.01
***		Total	12	546.5	3.41
011	_	Tunala	2	F7 2	0.0
211	6	Tupelo White Oak	3	57.3 26.2	0.2 0.2
		Misc. Frag.	_ '	6.5	0.01
		Total	4	90.0	0.41

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
211	7	Beech Oak Red Maple Total	1 3 · 1 5	19.7 108.1 32.8 160.6	0.01 1.1 0.2 1.31
211	8	Red Maple White Oak Total	1 1 2	19.7 36.0 55.7	0.01 0.3 0.31
211	9	Beech Tupelo Misc. Frag. Total	2 13 - 15	26.2 324.3 39.3 389.8	0.2 1.9 0.2 2.3
211	10	Red Maple Tupelo Misc. Frag. Total	1 2 - 3	9.8 42.6 49.1 101.5	0.1 0.4 0.4 0.9
212	11	Dogwood Maple Tulip Poplar Misc. Frag. Total	1 2 5 8	36.0 39.3 150.7 27.8 253.8	0.1 0.2 1.1 0.2
212	12	Red Maple Tupelo Misc. Frag. Total	3 3 - 6	55.7 68.8 13.1 137.6	0.2 0.2 0.2 0.6
212	13	American Holly Beech Dogwood Hickory Tulip Poplar Tupelo	1 1 3 5 10	9.8 16.4 32.8 72.1 235.8 19.7	0.01 0.01 0.01 0.9 1.3 0.2
		Total	21	386.6	2.43
212	14	White Oak Beech Total	2 4 6	42.6 32.8 75.4	0.4 0.3 0.7
212	15	Beech Red Maple White Oak Total	1 2 2 5	19.7 209.7 45.8 275.2	0.2 0.6 0.7

Forest Ecology Litter Box Data - 1974

D C	D. a.		Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
212	16	Oak Spanish Oak Sweet Gum White Oak Total	1 1 1 1 4	59.0 13.1 36.0 22.9	0.6 0.3 0.4 0.2
212	17	Beech Hornbeam Misc. Frag. Total	2 1 - 3	45.9 9.8 6.5 62.2	0.2 0.1 0.01 0.31
212	18	Pin Oak Red Maple Spanish Oak Misc. Frag. Total	1 1 1 - 3	16.4 9.8 36.0 32.8 95.0	0.15 0.2 0.5 0.7
212	19	White Oak Misc. Frag. Total	2 - 2	26.2 9.8 36.0	0.3 0.4 0.7
212	20	Beech Dogwood Red Maple Spanish Oak Tupelo Misc. Frag. Total	1 2 2 1 13 -	16.4 26.2 22.9 19.7 176.8 19.7	0.1 0.2 0.3 0.2 4.5 0.2 5.5
213	31	Beech	5	36.0	0.1
213	32	Beech Hickory Total	9 8 17	85.2 291.5 376.7	0.5 1.8 2.3
213	33	Beech Hickory Tulip Poplar Misc. Frag. Total	7 7 3 -	88.5 176.9 68.8 13.1 347.3	0.4 1.2 0.6 0.01 2.21
213	34	Beech Tulip Poplar Total	3 6 9	91.7 65.5 157.2	0.8 0.2 1.0

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
213	35	Tulip Poplar	5	52.4	0.6
		Tupelo	5 2 7	59.0	0.3
		Total	7	111.4	0.9
213	36	Beech	14	222.7	1.2
		Sweet Gum Tulip Poplar	] ]]	16.4 186.7	0.2 1.9
		Total	26	425.8	3.3
213	37	Spanish Oak	13	314.6	8.0
213	38	Beech Tulip Poplar	1 8	6.5 226.0	0.1 2.0
		White Oak	ĭ	3.3	0.1
		Misc. Frag.	10	1.6	0.01
		Total	10	237.4	2.21
213	39	Beech		19.7	0.3
213	40	Beech	3	22.9	0.1
		Misc. Frag.		3.3	0.01
		Total	3	26.2	0.11
214	21	American Elm	3	39.3	0.6
214	22	American Elm	14	137.6	1.4
214	23	American Elm	13	91.7	0.8
214	24	American Elm	94	511.1	6.8
		Cherry	5	32.8	0.5
		Total	99	543.9	7.3
214	25	American Elm	3	39.3	0.6
214	26	American Elm	23	163.8	1.5
214	27	American Elm	41	288.3	3.7
214	29	American Elm	20	137.6	2.3
214	30	American Elm	17	281.7	2.1
214	51	Misc. Frag.	-	33.0	0.2

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
214	52	Misc. Frag.	-	65.5	0.2
214	54	Misc. Frag.	· <b>-</b>	183.5	4.15
214	58	Sweet Gum Tupelo Misc. Frag. Total	1 2 - 3	6.6 19.7 157.2 183.5	0.1 0.1 1.6
217	59	American Elm Cherry Sweet Gum Tupelo Misc. Frag. Total	2 1 2 2 - 7	39.3 19.7 32.8 39.3 39.3	0.2 0.15 0.4 0.3 0.5
218	1	Beech Hornbeam Oak Tupelo Misc. Frag. Total	1 2 2 7 -	9.8 36.0 32.8 140.8 6.5 225.9	0.01 0.1 0.3 1.1 0.1
218	2	Oak Tupelo White Oak Total	1 3 1 5	32.8 32.8 16.4 82.0	0.3 0.1 0.1
218	3	Oak Tupelo White Oak Misc. Frag. Total	2 2 2 -	36.0 49.1 29.5 72.0 186.6	0.4 0.4 0.01 0.6
218	4	Persimmon Red Maple Total	1 5 6	16.4 68.8 85.2	0.3 0.5 0.8
218	5	Tupelo White Oak Misc. Frag.	3 1 -	62.2 32.8 19.7	0.5 0.6 0.1
		Total	4	114.7	1.2

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
218		Oak Tupelo White Oak Misc. Frag. Total	3 5. 4 - 12	78.6 81.9 52.4 88.4 301.3	0.5 0.7 0.6 0.9 2.7
218		Red Maple Tupelo White Oak Misc. Frag. Total	1 3 1 - 5	6.5 52.4 16.4 16.4	0.01 0.4 0.3 0.01 0.72
218	9	Beech Tupelo White Oak Misc. Frag. Total	4 13 2 - 19	19.7 229.3 29.5 88.4 366.9	0.01 2.8 0.01 0.3 3.12
218	10	Tupelo Misc. Frag. Total	1 - 1	9.8 59.0 68.8	0.01 0.5 0.51
218	11	Dogwood Red Maple Tulip Poplar Misc. Frag. Total	1 2 7 -	26.2 26.2 154.0 19.7 226.1	0.01 0.1 1.2 0.4
218	12	Red Maple Tulip Poplar Tupelo Spanish Oak Total	5 4 7 3	81.9 98.3 104.8 52.4 337.4	0.2 0.7 0.5 0.5
218	13	Beech Dogwood Tulip Poplar Misc. Frag. Total	1 3 8 - 12	6.5 65.5 252.2 16.4 340.6	0.01 0.01 1.5 0.01 1.53
218	14	Beech Dogwood Tupelo White Oak Total	3 1 1 6	16.4 9.8 19.7 91.7	0.1 0.1 0.2 0.7

			Manalaga	Long Courter	n
Day 25	Day		Number	Leaf Surface	Dry
Day of 1974	Box	Charine	of	Area (cm <sup>2</sup> )	Weight
19/4	Number	Species	Leaves	(CIII-)	(g)
218	15	Dogwood	2	16.4	0.1
2.0		Sweet Gum	2 12	232.6	2.2
		Virginia Pine	. 2	_	0.01
		Total	16	249.0	2.31
			_		
218	16	American Elm	ļ	32.8	0.4
		American Holly	]	6.5	0.01
		Dogwood	1	13.1	0.01
		0ak	2 8 1	39.3	0.5
		Hornbeam	8	55.7	0.2
		Red Maple		3.3	0.1
		Sweet Gum	2	95.0	1.1
		Misc. Frag.	-	26.2	0.3
		Total	16	271.9	2.62
218	17	Househoom	1	3.3	0.01
210	17	Hornbeam	1 2		0.5
		Spanish Oak	2	45.9	
	······································	Misc. Frag.	3	13.1	0.05
		Total	3	62.3	0.56
218	18	Sweet Gum	1	29.5	0.1
2.0		Misc. Frag.	_ `	22.9	0.2
		Total	7	52.4	0.3
010	10			00.0	0.0
218	19	White Oak	1	23.0	0.2
**************************************		Misc. Frag.	-	9.8	0.01
		Total	1	32.8	0.21
218	20	Dogwood	1	26.2	0.3
2.0	_0	0ak	i	9.8	0.01
		Tupelo	37	504.6	3.3
		Total .	39	540.6	3.61
				3,3,3	0.0.
219	31	Beech	_	-	0.3
		Sweet Gum	-		0.01
		Total	-	-	0.31
210	20	Dooch			0.1
219	32	Beech	•	-	0.1
		Spanish Oak	-	•••	0.1
		Sweet Gum	-	-	0.3
		Tulip Poplar	-		0.01
		Misc. Frag.			0.1
		Total	-	-	0.61

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm2)	(g)
219	33	Beech Oak Red Maple		:	0.6 0.2 0.01
		Total	_		0.81
219	34	Beech Tulip Poplar Misc. Frag.	:	<u>:</u>	0.3 1.4 0.4
		Total	-	-	2.1
219	35	Beech Tulip Poplar Misc. Frag. Total	- - - -	- - -	0.6 0.3 0.5
219	36	Beech Tulip Poplar Total	-		0.4 1.4 1.8
219	37	Beech Oak Tulip Poplar Misc. Frag. Total	-	- - - -	0.5 0.2 0.01 0.1 0.81
219	38	Beech Tupelo Virginia Pine Misc. Frag. Total	- - - -	- - - -	0.1 0.1 0.01 0.5 0.71
219	39	Beech Dogwood Tulip Poplar Misc. Frag. Total	- - - -	- - - - -	0.1 0.4 0.7 0.5
219	40	Beech Sweet Gum Misc. Frag. Total	- - -	- - - -	0.5 0.3 0.1 0.9

		P	Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
219	61	Sweet Gum	1	13.1	0.25
		Tulip Poplar	7	111.4	0.5
		Virginia Pine	48	104 -	0.2
		Total	56	124.5	0.95
219	62	Tulip Poplar	6	157.3	0.5
		Tupelo	1	16.4	0.02
		Virginia Pine	62	170 7	0.5
		Tota1	69	173.7	1.02
219	63	Red Maple	2	22:9	0.1
		Tulip Poplar	2 1	13.1	0.1
	AM	Virginia Pine	105	-	0.85
		Total	108	36.0	1.05
219	64	Hornbeam	4	16.4	0.05
		Tulip Poplar	4 3	98.3	0.7
		Virginia Pine	164	59.0	1.1
		Misc. Frag. Total	171	16.4 190.1	0.1
		10 64 1	171	150.1	1.33
219	65	Loblolly Pine	6	-	0.13
		Virginia Pine	44	7.6.4	0.24
		Misc. Frag. Total	- 50	16.4 16.4	0.1
		10 ta 1	30	10.4	0.47
219	66	Hor <b>nb</b> eam _	111	786.1	3.8
		Tulip Poplar	8	104.8	0.8
		Total	119	890.9	4.6
219	67	Hornbeam	13	65.5	0.4
		0ak	1	29.5	0.2
		Tulip Poplar	2	16.4	0.3
		Misc. Frag. Total	- 16	13.1 124.5	0.1
		10001	10	124.5	1.0
219	68	Red Maple	5	45.9	0.25
		Tulip Poplar	1	13.1	0.05
		Virginia Pine Total	2 8	3.3 62.3	0.15
		10001	9	02.0	0,43
219	69	Sweet Gum	1	39.3	0.35
		Tupelo	1	16.4	0.05
		Virginia Pine Misc. Frag.	22 1	9.8	0.4 0.05
		Total	25	65.5	0.85

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
219	70	Loblolly Pine Tulip Poplar Total	305 1 306	22.9 22.9	15.9 0.1 16.0
219	78	Red Maple	_		0.3
219	80	Red Maple	1	6.5	0.01
220	21	American Elm Persimmon Misc. Frag. Total	39 1 - 40	504.5 9.8 62.2 576.5	3.2 0.03 0.8 4.03
220	22	American Elm Persimmon Misc. Frag. Total	19 15 34	193.3 88.4 121.2 402.9	1.4 0.5 1.6 3.5
220	23	American Elm Persimmon Misc. Frag. Total	23 13 - 36	321.1 32.8 59.0 412.9	2.1 0.3 0.8 3.2
220	24	American Elm Misc. Frag. Total	46 - 46	579.8 72.1 651.9	5.7 1.1 6.8
220	25	American Elm Misc. Frag. Total	173 - 173	2001.5 190.0 2191.5	17.6 3.0 20.6
220	26	American Elm Misc. Frag. Total	_2 2	9.8 98.2 108.0	0.1 1.2 1.3
220	27	American Elm Misc. Frag. Total	30 - 30	324.3 36.0 360.3	2.0 0.4 2.4
220	28	American Elm	16	111.4	1.2
220	29	American Elm Misc. Frag. Total	24 - 24	245.7 45.9 291.6	2.9 0.8 3.7

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
220	30	American Elm Beech Persimmon Misc. Frag. Total	25 1 3 - 29	386.6 9.8 13.1 52.4 461.9	2.9 0.05 0.1 0.2 3.25
220	52	Dogwood Sweet Gum Misc. Frag. Total	2 2 - 4	26.2 13.1 6.5 45.8	0.41 0.2 0.06 0.67
220	53	Sweet Gum Misc. Frag. Total	3 - 3	19.7 16.4 36.1	0.05 0.03 0.08
220	57	Sweet Gum Misc. Frag. Total	1 -	6.5 - 6.5	0.01 0.04 0.05
220	58	Misc. Frag.	-	45.9	0.6
220	59	Red Maple Misc. Frag. Total	1 - 1	3.3 26.2 29.5	0.01 0.15 0.16
220	60	Tulip Poplar	10	239.2	1.1_
225	1	Tupelo Misc. Frag. Total	11 - 11	203.1 22.9 226.0	1.4 0.2 1.6
225	2	Tupelo White Oak Misc. Frag.	5 1 -	65.5 26.2 6.5 98.2	0.3 0.1 0.01 0.41
225	3	Total Tupelo White Oak Misc. Frag.	4 3 	45.9 176.9 26.2	0.3 1.1 0.01
		Total	7	249.0	1.41

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
225	4	Red Maple Tupelo Misc. Frag.	2 . 9 	6.6 160.5 9.8 176.9	0.1 1.0 0.1 1.2
225	5	Total Tupelo White Oak Misc. Frag. Total	10 1 -	235.9 32.8 19.7 288.4	1.7 0.2 0.01
225	6	Spanish Oak Tupelo White Oak Total	1 8 2	49.1 114.7 52.4 216.2	0.6 0.8 0.6
225	7	Beech Oak Red Maple Tupelo White Oak Misc. Frag.	1 3 3 6 2 -	13.1 45.9 19.7 117.9 42.6 13.1	0.01 0.9 0.1 0.9 0.6 0.1
225	8	Tupelo White Oak Total	1 1 2	13.1 6.5 19.6	0.01 0.1 0.11
225	9	Beech Tupelo Virginia Pine White Oak Misc. Frag. Total	1 22 6 4 -	6.5 396.4 - 32.8 42.6 478.3	0.01 2.6 0.1 0.3 0.3 3.31
225	10	Oak Tupelo White Oak Misc. Frag. Total	2 8 1 -	85.2 108.1 22.9 6.5 222.7	1.3 0.7 0.3 0.3
226	11	Tulip Poplar White Oak Misc. Frag. Total	4 1 - 5	55.7 16.4 6.5 78.6	0.5 0.1 0.3 0.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
226	12	Beech Tulip Poplar Tupelo Misc. Frag. Total	2 5 4 -	29.5 98.3 55.7 9.8 193.3	0.1 0.6 0.4 0.1
226	13	Beech Dogwood Tulip Poplar Misc. Frag. Total	1 1 12 -	19.7 6.5 311.2 16.4 353.8	0.01 0.01 2.5 0.2 2.72
226	14	Beech Misc. Frag. Total	_2 	26.2 9.8 36.0	0.2 0.1 0.3
226	15	Dogwood Sweet Gum Misc. Frag. Total	1 6 - 7	22.9 104.8 22.9 150.6	0.3 0.8 0.3
226	16	Hornbeam Misc. Frag. Total	9 - 9	39.3 3.3 42.6	0.4 0.1 0.5
226	17	Oak Tulip Poplar Virginia Pine Misc. Frag. Total	1 1 10 - 12	9.8 19.7 - 3.3 32.8	0.3 0.4 0.2 0.1
226	18	Oak Misc. Frag. Total	1 - 1	26.2 6.5 32.7	0.7 0.1 0.8
226	19	Red Maple Sweet Gum Total	1 1 2	39.3 3.3 42.6	0.5 0.2 0.7
226	20	Tupelo	23	301.4	2.0
227	31	Beech	7	88.4	0.3
227	32	Beech	5	68.8	0.2

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
227	33	Beech Oak Misc. Frag. Total	5 1  6	6.5 3.3 9.8	0.1 0.1 0.01 0.21
227	34	Beech Spanish Oak Tulip Poplar Total	2 2 2 6	45.9 55.7 49.1 150.7	0.4 0.9 0.6
227	35	Beech Tulip Poplar Tupelo Total	7 4 2 13	144.1 52.4 52.4 248.9	0.8 0.5 0.1
227	36	Sweet Gum Misc. Frag. Total	- - 1	6.5 6.5 13.0	0.1 0.1 0.2
227	37	Beech Oak Total	2 1 3	36.0 6.5 42.5	0.1 0.1 0.2
227	38	Beech Spanish Oak Tulip Poplar Total	4 1 2 7	114.7 9.8 19.7 144.2	0.7 0.1 0.6
227	39	Beech Dogwood Tulip Poplar Total	3 1 6	62.2 26.2 114.7 203.1	0.6 0.3 1.2 2.1
227	40	Beech Sweet Gum Total	3 1 4	75.3 36.0 111.3	0.5 0.2 0.7
228	21	American Elm Persimmon Total	9 7 16	144.1 45.9 190.0	1.4 0.2 1.6

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
228	22	American Elm Black Cherry Persimmon Total	9 6 12 27	26.2 45.9 59.0 131.1	0.7 0.3 0.4
228	23	American Elm	1	32.8	0.2
228	24	American Elm	104	648.6	9.9
228	25	American Elm Black Willow Hornbeam Total	1 4 2 7	39.3 59.0 52.4 150.7	0.1 0.3 0.1 0.5
228	26	American Elm Black Cherry Total	6 27 33	150.7 255.5 406.2	1.1 1.5 2.6
228	27	American Elm	45	321.0	5.1
228	28	American Elm	17	104.8	0.85
228	29	American Elm	13	117.9	0.9
228	30	American Elm	22	222.8	2.4
232	1	Oak Spanish Oak Tupelo	1 1 8	39.3 9.8 157.2	0.5 0.1 1.4
232	2	Total Spanish Oak Tupelo White Oak	10 2 6 -	206.3 59.0 78.6 3.3	2.0 0.6 0.55 0.04
000		Total	8	140.9	1.19
232	3	Tupelo	]	111.4	0.68
232	4	Red Maple Tupelo Total	3 13 16	59.0 222.8 281.8	0.22 1.9 2.12

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
232	5	Spanish Oak Tupelo White Oak	2 6 1 9	52.4 117.9 26.2 196.5	0.6 0.9 0.1
232	6	Total Tupelo White Oak	13 2	157.2 55.7	1.4
The state of the s	PP NEW COLD NEW HOME AND	Misc. Frag. Total	15	9.8 222.7	2.0
232	7	Dogwood Oak Red Maple Tupelo	4 3 1	62.2 39.3 32.3 22.9	0.2 0.6 0.1 0.1
TO THE PERSON OF		White Oak Total	i 10	9.8 166.5	0.1 1.1
232	9	Tupelo White Oak Total	24 2 26	330.8 16.4 347.2	2.3 0.1 2.4
232	10	Tupelo White Oak Total	7 1 8	173.6 16.4 190.0	0.8 0.1 0.9
232	41	Black Cherry Pin Oak Total	27 1 28	197.6 19.7 217.3	1.01 0.05 1.6
232	42	Pin Oak Sour Cherry Misc. Frag. Total	1 3 - 4	13.1 39.3 19.7 72.1	0.01 0.05 0.05 1.11
232	43	Sour Cherry	8	65.5	0.4
232	44	Sour Cherry Sweet Gum Tupelo Total	10 3 13 26	52.4 19.7 226.0 298.1	0.3 0.2 2.3 2.8
232	45	Sour Cherry Sweet Gum Total	30 2 32	203.1 39.6 242.7	1.8 0.4 2.2

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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
232	46	Sweet Gum Misc. Frag. Total	8 2 · 10	111.1 26.2 137.3	1.0 0.01 1.01
232	47	Black Cherry Sweet Gum Total	12 6 18	78.6 78.6 157.2	0.6 0.9 1.5
232	48	Tulip Poplar Misc. Frag. Total	10 4 14	275.2 32.8 308.0	3.0 0.1 3.1
232	49	Sweet Gum Misc. Frag. Total	6 6	111.1 78.6 189.7	1.0 0.2 1.2
232	50	Sour Cherry Sweet Gum Total	5 1 6	52.4 26.2 78.6	0.2 0.2 0.4
234	11	Tulip Poplar Tupelo Total	3 2 5	163.8 32.8 196.6	1.5 0.2 1.7
234	12	Beech Black Willow Tulip Poplar Tupelo Spanish Oak Total	1 1 8 7 1	19.7 6.5 216.2 72.1 19.7 334.2	0.1 0.01 1.4 0.8 0.2 2.51
234	13	Beech Tulip Poplar Tupelo Total	3 4 3	32.8 72.1 39.3 144.2	0.1 1.0 0.2
234	14	Beech White Oak Total	1 1 2	6.5 13.1 19.6	0.05 0.1 0.15
234	15	Hornbeam Red Maple Sweet Gum Total	2 5 5	19.7 59.0 65.5 144.2	0.01 0.35 0.7 1.06

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
234	16	American Elm Dogwood Hornbeam Red Maple Spanish Oak Sweet Gum Total	2 1 6 2 1 2	45.9 6.5 45.9 32.8 26.2 19.7	0.7 0.01 0.3 0.4 0.2 0.15
234	17	Dogwood Spanish Oak Yellow Oak Total	1 3 1 5	6.5 72.1 32.8 111.4	0.05 1.2 0.35 1.60
234	18	Beech Dogwood Spanish Oak Total	1 1 1 3	13.1 6.5 6.5 26.1	0.1 0.04 0.1 0.24
234	19	Beech Dogwood Red Maple White Oak Yellow Oak Total	1 1 2 1 1	13.1 32.8 314.5 26.2 6.5	0.15 0.2 0.05 0.6 0.05
234	20	Dogwood Spanish Oak Tupelo Total	1 1 27 29	26.2 13.1 262.1 301.4	0.1 0.3 3.6 4.0
234	31	Beech	3	45.9	0.3
234	32	Beech Dogwood Sweet Gum Total	2 1 3 6	45.9 19.7 39.3 104.9	0.2 0.15 0.4 0.75
234	33	Beech Dogwood Sweet Gum Total	9 1 1	124.5 32.8 19.7 177.0	0.1 0.05 0.15
234	34	Beech Tulip Poplar White Oak Total	1 2 1 4	32.8 32.8 32.8 98.4	0.2 0.3 0.45 0.95

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Day of	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
234	35	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	4 1 1 - 6	45.9 13.1 13.1 26.2 98.3	0.4 0.15 0.1 0.2 0.85
234	36	Sweet Gum Tulip Poplar Total	1 4 5	13.1 98.3 111.4	0.15 1.0 1.15
234	37	Beech	2	19.7	0.17
234	38	Beech	4	59.0	0.6
234	39	Dogwood Hickory Tulip Poplar Total	1 9 3 13	13.1 104.8 39.3 157.2	0.1 0.1 0.5 0.7
234	40	Beech Oak Spanish Oak Sweet Gum Total	1 1 1 2 5	20.0 39.3 32.8 32.8 124.9	1.0 0.5 0.4 0.4 2.3
234	76	Black Willow	5	20.0	0.05
234	79	Black Willow	7	32.8	0.3
235	21	American Elm	43	635.5	3.5
235	22	American Elm Sour Cherry Total	56 9 64	550.4 52.4 602.8	3.9 0.2 4.1
235	23	American Elm	19	294.8	1.6
235	24	American Elm	191	2044.2	18.2
235	25	American Elm Elm Total	17 33 50	190.0 255.5 445.5	2.4 2.1 4.5

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
235	26	American Elm Black Cherry Total	94 78 ·172	1533.2 596.2 2129.4	8.6 6.5 15.1
235	27	American Elm	102	1113.8	13.3
235	28	American Elm	62	727.3	5.8
235	29	American Elm	61	681.4	5.8
235	30	American Elm	68	1140.0	8.9
235	55	Persimmon Sour Cherry Total	30 2 32	439.0 6.5 445.5	4.9 0.01 4.91
235	57	Sweet Gum	4	39.3	0.5
235	58	Sweet Gum Tupelo Total	5 6 11	26.2 98.3 124.5	0.6 0.6 1.2
235	59	Sour Cherry Sweet Gum Tupelo Misc. Frag. Total	1 1 3 -	19.7 32.8 52.4 19.7	0.02 0.4 0.6 0.05
235	60	American Elm Sweet Gum Tulip Poplar	4 8 8	19.7 117.9 150.7	0.03 1.1 1.0
239	1	Total Tupelo Virginia Pine White Oak	20 30 2 1	288.3 517.6 - 19.7	2.13 5.69 0.01 0.25
239	2	Total Spanish Oak Tupelo White Oak Total	33 2 9 3 14	537.3 32.8 170.4 65.5 268.7	5.95 0.5 1.4 0.9 2.8
239	3	Spanish Oak	2	26.2	0.4

			N		
Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
13/7	Humber	эрсстсэ	Leaves	(cm)	(9/
239	4	Red Maple	14	517.6	2.8
		Tupelo	8	176.9	1.6
		Total	22	694.5	4.4
239	5	Beech	1	26.2	0.1
203	· ·	Blackjack Oak	3	85.2	1.49
		Tupelo	3 22	353.8	2.5
		White Oak	3	78.6	1.15
		Total	29	543.8	5.24
239	6	Tupelo	33	648.6	3.45
200	O	White Oak	8	111.4	1.6
		Total	41	760.0	5.05
	_				
239	7	Black Oak	2 2 3 4	52.4	0.5
		Dogwood	2	32.8 39.3	0.1 0.2
		Red Maple Spanish Oak	3 /l	59.0	0.2
		Tupelo	3	45.9	0.3
		Total	14	229.4	1.9
000		D1 1 0 1	2	06.0	0.4
239	8	Black Oak	1	26.2	0.4
		Red Maple Spanish Oak	2 1	32.8 19.7	0.2 0.1
		Total	4	78.7	0.7
239	9	Beech	13	170.4	0.9
		Red Maple	3	39.3	0.2
		Tupelo	27	511.1	2.9
		White Oak Misc. Frag.	3 7	39.3 91.7	0.6 0.7
		Total	53	851.8	5.3
		, , , , , , , , , , , , , , , , , , , ,	33	001.0	0.0
239	10	Dogwood	1	32.8	0.1
		0ak	]	26.2	0.5
		Spanish Oak	6	85.2	1.1
		Tupelo Total	22 30	511.1 655.3	2.77 4.47
		10001	30	000.0	7.17
239	41	Cherry	15	203.1	1.0
		Tulip Poplar	j	32.8	0.2
		Tupelo	7	140.9	0.7
		Total	23	376.8	1.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
239	42	American Elm Black Cherry Sweet Gum Tulip Poplar Total	2 4 56 1 63	13.1 26.2 530.7 6.5 576.5	0.03 0.1 4.9 0.01 5.04
239	43	Black Cherry Persimmon Sweet Gum Total	4 2 5	32.8 32.8 39.3 104.9	0.3 0.2 0.45 0.95
239	44	Black Cherry Persimmon Pin Oak Sweet Gum Total	30 43 1 11 85	203.1 563.5 32.8 85.2 884.6	1.3 4.6 0.3 1.0 7.2
239	45	Cherry Sweet Gum Tulip Poplar Total	77 13 15	432.4 163.8 301.4 897.6	2.9 2.1 2.7 7.7
239	46	Black Cherry Sweet Gum Tulip Poplar Total	3 35 1 39	32.8 386.6 19.7 439.1	0.2 3.2 0.1 3.5
239	47	Black Cherry Sweet Gum Tulip Poplar Total	15 14 2 31	170.4 78.6 26.2 275.2	1.0 0.9 0.1 2.0
239	48	Persimmon Sweet Gum Tulip Poplar Total	1 2 15	19.7 13.1 380.0 412.8	0.1 0.1 3.0 3.2
239	49	Black Cherry	5	32.8	0.4
239	50	Black Cherry Persimmon Pin Oak Sweet Gum Total	12 1 1 6 20	52.4 19.7 19.7 59.0 150.8	0.35 0.2 0.15 0.5 1.20

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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
240	31	Beech Pine Spanish Oak Tulip Poplar Total	7 6 2 2 17	78.6 6.5 19.7 13.1	0.5 0.1 0.3 0.2
240	32	Beech Dogwood Sweet Gum Total	9 1 3 13	111.4 19.7 65.5 196.6	0.6 0.1 0.8
240	33	Beech Dogwood Hornbeam Sweet Gum Total	9 2 1 1	176.9 39.3 6.5 32.8 255.5	1.0 0.2 0.01 0.4 1.61
240	34	Beech Oak Tulip Poplar Tupelo Total	7 2 6 1	117.9 6.5 196.6 13.1 334.1	0.5 0.1 1.3 0.1 2.0
240	35	Beech Hornbeam Sweet Gum Tulip Poplar Misc. Frag. Total	4 4 2 2 2 -	45.9 19.7 32.8 19.7 19.7	0.5 0.1 0.4 0.3 0.3
240	36	Tulip Poplar Misc. Frag. Total	13 - 13	406.2 45.9 452.1	2.5 0.6 3.1
240	37	Beech Dogwood Tulip Poplar Misc. Frag. Total	6 3 1 -	104.8 59.0 6.5 26.2 196.5	0.8 0.3 0.04 0.1
240	38	Beech Pine Misc. Frag. Total	5 8 - 13	131.0 6.6 32.8 170.4	1.55 0.1 0.3 1.95

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
240	39	Beech Tulip Poplar Tupelo Total	7 12 1 20	78.6 307.9 19.7 406.2	0.3 1.6 0.05 1.95
240	40	Beech Dogwood Total	9 1 10	196.6 19.7 216.3	1.15 0.1 1.25
240	72	Black Willow	2	6.5	0.12
240	73	Black Willow	2	6.5	0.05
240	76	Black Willow Misc. Frag. Total	5 - 5	13.1 6.5 19.6	0.2 0.05 0.25
240	79	Black Willow	18	32.8	0.7
240	80	0ak	_	13.1	0.01
241	11	Beech Red Maple Sweet Gum Tulip Poplar Total	2 3 5 15 25	39.3 39.3 72.1 373.5 524.2	0.1 0.1 0.5 3.0
241	12	Beech Dogwood Red Maple Spanish Oak Tulip Poplar Tupelo White Oak Total	5 1 1 1 11 8 1	98.3 19.7 39.3 45.9 288.3 144.1 6.5	0.2 0.05 0.3 0.3 2.0 0.8 0.01 3.66
241	13	Beech Dogwood Oak Red Maple Sweet Gum Sycamore Tulip Poplar Misc. Frag.	9 3 1 1 3 5 19 -	180.2 52.4 6.5 6.5 45.9 170.3 432.4 85.2	1.06 0.1 0.01 0.01 0.4 1.5 3.4 1.2

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm²)	(g)
241	14	American Holly	2	13.1	0.1
241	14	Beech	2 4	59.0	0.55
			. 2	26.2	0.33
		Red Maple	18	229.3	
		White Oak Total	26	327.6	2.3
		IULai	20	327.0	3.13
241	15	Dogwood	4	91.7	0.4
		Hickory	1	59.0	0.2
		Hornbeam	i	19.7	0.01
		Persimmon	j	39.3	0.2
		Sweet Gum	14	150.7	2.25
		White Oak	2	59.0	0.2
	ELDING COMPANY D. J. V.	Total	23	419.4	3.26
		10001	20	713,7	3.20
241	16	Beech	6	59.0	0.75
		Spanish Oak	6 1	52.4	0.1
		Sweet Gum		104.8	1.0
		White Oak	5 2	52.4	0.25
		Yellow Birch	45	190.0	0.48
		Misc. Frag.	-	39.3	0.01
		Total	59	497.9	2.59
241	17	Beech	1	13.1	0.02
		Black Cherry	1	13.1	0.1
		Blackjack Oak	2 <b>7</b>	52.4	0.7
		Spanish Oak		65.5	0.75
		Sweet Gum	1	6.5	0.08
		Tupelo	2	26.2	0.1
		White Oak	2 1	13.1	0.1
		Yellow Birch	9	45.9	0.05
		Tota1	24	235.8	1.9
241	18	0ak	1	32.8	0.3
		Spanish Oak	1	26.2	0.2
		Sweet Gum	1	26.2	0.4
		Total	3	85.2	0.9
2/1	10	Danah	7	FO 0	0.10
241	19	Beech		59.0	0.18
		Spanish Oak		13.1	0.03
		Sweet Gum	1 3 5	59.0	1.0
		Red Maple	5	124.5	0.6
		White Oak		26.2	0.15
		Total	11	281.8	1.96

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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
241	20	Cherry Oak Spanish Oak Sweet Gum Tupelo Total	1 1 · 3 4 96 105	13.1 6.5 26.2 19.7 1303.8 1369.3	0.01 0.1 0.4 0.3 11.3
242	21	American Elm Black Locust Cherry Total	56 1 1 58	425.9 6.5 13.1 445.5	5.5 0.04 0.1 5.64
242	22	American Elm Black Locust Cherry Total	41 12 4 57	262.1 19.7 19.7 301.5	3.4 0.3 0.3 4.0
242	23	American Elm	63	871.4	7.3
242	24	American Elm	91	923.8	8.6
242	25	American Elm	20	301.4	3.6
242	26	American Elm Cherry Total	43 71 114	445.5 366.9 812.4	4.1 2.9 7.0
242	27	American Elm	85	1028.7	11.6
242	28	American Elm Black Locust Total	73 10 83	812.4 52.4 864.8	8.2 0.2 8.4
242	29	American Elm Black Locust Hickory Total	99 3 1 103	1120.4 13.1 19.7 1153.2	10.8 0.1 0.2 11.1
242	30	American Elm Cherry Misc. Frag. Total	55 2 - 57	1035.2 6.5 19.7 1061.4	8.9 0.1 0.1 9.1
242	52	Dogwood Persimmon Sweet Gum Total	11 20 1 32	124.5 131.0 13.1 268.6	1.05 1.9 0.2 3.15

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
242	53	Pine Sassafras Sweet Gum	27 3	6.5 452.1 6.5	0.02 3.3 0.2
		Total	31	465.1	3.52
242	54	Persimmon	4	26.2	0.5
242	55	Persimmon	62	602.8	6.7
242	57	Sweet Gum	4	13.1	0.2
242	58	Persimmon Sweet Gum Tupelo Total	7 3 2 12	59.0 19.7 39.3 118.0	0.9 0.2 0.4
242	59	American Elm Cherry Persimmon Spanish Oak Sweet Gum Total	2 4 7 1 2	13.1 19.7 32.8 6.5 19.7	0.2 0.2 1.0 0.1 0.2
242	60	American Elm Red Maple Sweet Gum Tulip Poplar Total	2 8 14 35 59	19.7 78.6 117.9 570.0 786.2	0.2 0.7 1.4 5.9
246	1	Persimmon Tupelo Misc. Frag. Total	5 11 - 16	117.9 242.4 19.7 380.0	1.35 2.1 0.25 3.7
246	2	Black Oak Tupelo White Oak Misc. Frag. Total	1 3 3 - - 7	52.4 59.0 26.2 39.3	0.75 0.45 0.25 0.4 1.85
246	3	Dogwood Spanish Oak Tupelo White Oak Total	1 3 19 2 25	13.1 32.8 314.5 6.5 366.9	0.1 0.65 2.15 0.2 3.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
246	4	Black Oak Persimmon Pine Red Maple Tupelo White Oak Misc. Frag.	1 3 3 3 14 4 -	19.7 39.3 3.3 111.4 235.9 59.0 72.1	0.3 0.4 0.1 0.75 1.75 0.75 0.5 4.55
246	5	Black Oak Persimmon Tupelo White Oak Misc. Frag. Total	1 3 16 1 - 21	45.9 39.3 288.3 33.8 65.5	0.6 0.3 2.0 0.35 0.5 3.75
246	6	Black Oak Tupelo White Oak Misc. Frag. Total	1 29 2 - 32	26.2 563.5 39.3 85.2 714.2	0.35 3.15 0.5 0.85 4.85
246	7	Dogwood Red Maple Tupelo White Oak Misc. Frag. Total	1 1 4 1 -	6.5 19.7 59.0 19.7 13.1	0.1 0.2 0.55 0.3 0.2
246	8	Black Oak Chestnut Oak Pine Red Maple Tupelo Total	2 1 3 1 1 8	33.0 19.7 3.3 3.3 6.5 65.8	0.47 0.3 0.1 0.02 0.1 0.99
246	9	Beech Red Maple Tupelo White Oak Misc. Frag. Total	5 1 27 1 -	32.8 13.1 465.2 6.5 65.5	0.35 0.2 2.8 0.2 0.7 4.25

			Numbara	Last Cunface	Day
Day of	Pay		Number of	Leaf Surface	Dry
Day of 1974	Box	Consider		Area (cm <sup>2</sup> )	Weight
19/4	Number	Species	Leaves	(CIIIsm)	(g)
246	10	Beech	1	13.1	0.7
240	10		i T		
		Spanish Oak	' " "	13.1	0.45
		Tupelo	. 13	150.7	1.25
WATER STREET OF THE CONTRACT OF THE STREET, SAN THE STREET, SA	#//#	0ak		. 19.7	0.3
		Total	15	196.6	2.10
246	41	Cherry	64	471.7	2.35
240	77 1		59	897.6	5.7
		Sweet Cherry	2		
		Sweet Gum	2	19.7	0.3
		Misc. Frag.	100	39.3	0.5
		Total	125	1428.3	8.85
246	42	Sweet Gum	62	465.2	5.3
		Misc. Frag.	-	19.7	0.25
**************************************		Total	62	484.9	5.55
				131,2	
246	43	Cherry	9 1	59.0	0.4
		Persimmon	1	13.1	0.05
		Red Maple	1	13.1	0.01
		Sweet Gum	9	59.0	0.65
		Total	20	144.2	1.11
046	Δ.α	01	0.5	707.0	
246	44	Cherry	25	131.0	0.8
		Persimmon	130	1539.7	11.25
		Sweet Gum	17	183.5	2.2
		Misc. Frag.	Ma	163.8	1.8
		Total	172	2018.0	16.05
246	45	Cherry	64	307.9	2.25
240	43	Sweet Gum	12		
				98.3	1.5
		Tulip	21	864.9	6.15
		Misc. Frag.	-	13.1	0.2
		Total	97	1284.2	10.1
246	46	Cherry	4	32.8	0.2
		Persimmon	4 7	26.2	0.3
		Sweet Gum	61	746.9	6.6
	and the Application of the Office and the Contract of the Cont	Total	72	805.9	6.6 7.1
		. 0 0001	, _	000.3	7 . 1
246	47	Cherry	14	216.2	2.0
		Sweet Gum	8	144.1	1.8
		Tulip	1	6.5	0.01
		Misc. Frag.		26.2	0.5
Company Company Section and Conference of the Co	THE REPORT OF THE PARTY OF THE	Total	23	393.0	4.31

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
246	48	Sweet Gum Tulip Total	4 25 29	26.2 524.2 550.4	0.5 4.8 5.3
246	49	Cherry Persimmon Sweet Gum Misc. Frag. Total	3 3 12 -	6.5 13.1 98.3 19.7	0.01 0.2 1.6 0.2 2.01
246	50	Cherry Sweet Gum Total	41 4 45	183.5 39.3 222.8	1.1 0.4 1.5
247	31	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	12 1 2 - 15	190.0 26.2 32.8 19.7 268.7	1.1 0.4 0.2 0.2
247	32	Beech Dogwood Sweet Gum Tulip Poplar Misc. Frag. Total	4 1 2 1 -	52.4 26.2 19.7 9.8 19.7	0.2 0.01 0.1 0.05 0.2 0.56
247	33	Beech Spanish Oak Sweet Gum Tulip Poplar Total	15 1 1 7 24	176.9 19.7 59.0 176.9 432.5	0.85 0.2 0.4 1.0 2.45
247	34	Beech Tulip Poplar Tupelo Misc. Frag. Total	9 9 1 - 19	163.8 262.0 13.1 45.9 484.8	0.8 0.6 0.05 0.8 2.25
247	35	Beech Hornbeam Sweet Gum Tulip Poplar Misc. Frag. Total	6 2 1 11 - 20	91.7 13.1 13.1 137.6 85.2 340.7	0.7 0.01 0.1 0.7 0.7 2.21

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
247	36	Beech Sweet Gum Tulip Poplar Total	1 1 14 16	32.8 19.7 543.8 596.3	0.2 0.2 3.0 3.4
247	37	Beech Tulip Poplar Misc. Frag. Total	4 3 -	91.7 144.1 22.9 258.7	0.65 1.25 0.3 2.20
247	38	Beech Virginia Pine Misc. Frag. Total	7 2 - 9	85.2 3.3 19.7 108.2	0.55 0.01 0.1 0.66
247	39	Beech Dogwood Tulip Poplar Tupelo Misc. Frag. Total	3 4 9 3 -	52.4 72.1 203.1 45.9 65.5 439.0	0.25 0.2 1.0 0.1 0.5 2.05
247	40	Beech Quercus heterophyl Sweet Gum Tulip Poplar Misc. Frag. Total	3 1a 5 5 1 -	65.5 242.4 150.7 13.1 39.3 511.0	0.5 1.55 1.6 0.1 0.3 4.05
247	72	Black Willow	1	3.3	0.01
247	76	Black Willow	11	3.3	0.01
247	79	Black Willow Red Maple Total	16 2 18	52.4 26.2 78.6	0.5 0.1 0.6
247	80	Black Oak Misc. Frag. Total	1 - 1	6.5 6.5 13.0	0.01 0.1 0.11
248	11	Dogwood Red Maple Tulip Poplar Misc. Frag. Total	2 3 19 -	16.4 13.1 458.6 26.2 514.3	0.01 0.1 3.65 0.2 3.96

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
248	12	Beech Tulip Poplar Tupelo Misc. Frag. Total	1 15 7 - 23	6.5 452.1 98.3 59.0 615.9	0.01 2.6 0.65 0.4 3.66
248	13	Beech Pin Oak Red Maple Sweet Gum Sycamore Tulip Poplar Misc. Frag.	3 1 1 3 1 15 -	26.2 26.2 9.8 39.3 16.4 301.4 32.8	0.1 0.5 0.01 0.6 0.1 3.2 0.55 5.06
248	14	Tupelo White Oak Misc. Frag. Total	2 7 - 9	13.1 78.6 32.8 124.5	0.1 1.3 0.25 1.65
248	15	Dogwood Hornbeam Sweet Gum Virginia Pine Misc. Frag. Total	6 3 7 13 -	163.8 39.3 157.2 6.5 65.5	0.73 0.09 1.65 0.15 0.5 3.12
248	16	Black Oak Dogwood Hornbeam Sweet Gum White Oak Misc. Frag. Total	10 5 45 9 1 -	596.2 78.6 127.8 235.9 26.2 39.3	10.6 0.3 0.35 2.55 0.2 0.2
248	17	Dogwood Hornbeam Spanish Oak Sweet Gum Tupelo Virginia Pine White Oak Misc. Frag.	2 25 1 3 1 48 2 -	39.3 59.0 32.8 36.0 19.7 26.2 39.3 72.1	0.2 0.1 0.55 0.4 0.1 0.6 0.6 0.9

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
248	18	Dogwood Spanish Oak Sweet Gum Misc. Frag. Total	3 3 1 - 7	72.1 52.4 26.2 59.0 209.7	0.35 0.55 0.3 0.55
248	19	Dogwood Sweet Gum White Oak Misc. Frag. Total	4 4 3 -	36.0 39.3 32.8 39.3	0.1 0.85 0.3 0.4
248	20	Spanish Oak Sweet Gum Tupelo Misc. Frag.	3 2 63 -	39.3 19.7 910.7 131.0	0.6 0.2 6.9 1.5
248	61	Persimmon Red Maple Misc. Frag. Total	5 2 - 7	42.6 29.5 39.3	0.47 0.45 0.7 1.62
248	62	Pin Oak Misc. Frag. Total	5 - 5	52.4 13.1 65.5	0.65 0.25 0.90
248	63	Black Cherry	1	13.1	0.15
248	64	Black Cherry Persimmon Red Maple Sweet Gum Misc. Frag. Total	2 2 2 5 -	19.7 26.2 22.9 85.2 13.1	0.2 0.4 0.4 1.1 0.3
248	66	Black Cherry Cherry Persimmon Sweet Cherry Total	18 - 2 2 2	91.7 9.8 32.8 19.7	0.8 0.2 0.5 0.25

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
248	67	Persimmon Red Maple Misc. Frag. Total	6 3 -	85.2 26.2 65.5 176.9	0.75 0.3 0.7 1.75
248	68	Black Cherry Red Maple Misc. Frag.	36 8 -	196.5 111.4 45.9	1.1 0.9 0.45
248	70	Total American Elm Black Cherry Sweet Gum Total	44 2 4 5	353.8 6.5 19.7 26.2 52.4	2.45 0.15 0.3 0.5 0.95
249	21	American Elm Black Cherry Total	27 1 28	455.4 3.3 458.7	3.55 0.01 3.56
249	22	American Elm Black Cherry Misc. Frag.	13 9 -	101.6 49.1 163.8	0.75 0.45 1.3
249	23	Total American Elm Black Walnut Misc. Frag. Total	22 26 1 - 27	314.5 550.4 6.5 163.8 720.7	2.50 3.2 0.05 0.85 4.10
249	24	American Elm Black Cherry Misc. Frag. Total	60 4 - 64	671.6 26.2 91.7 789.5	5.8 2.45 1.2 9.45
249	25	American Elm Black Walnut Misc. Frag. Total	6 13 - 19	75.3 127.8 173.6 376.7	0.65 1.35 1.85 3.85
249	26	American Elm Black Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	9 57 2 1 -	212.9 412.8 49.1 13.1 72.1 760.0	1.2 2.4 0.3 0.05 0.5 4.45

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
249	27	American Elm Misc. Frag. Total	45 - 45	550.4 157.2 707.6	3.3 0.9 4.2
249	28	American Elm Misc. Frag. Total	19 - 19	235.9 36.0 271.9	1.9 0.45 2.35
249	29	American Elm Black Walnut Misc. Frag. Total	45 2 - 47	589.7 13.1 167.1 769.9	3.5 0.1 1.25 4.85
249	30	American Elm Black Walnut Chestnut Oak Misc. Frag. Total	21 10 1 - 32	491.4 111.4 22.9 249.0 874.7	3.35 1.0 0.2 1.75 6.3
249	51	Cherry	8	36.0	0.35
249	52	Dogwood Persimmon Misc. Frag. Total	2 49 - 51	29.5 314.5 60.0 404.0	0.2 2.4 0.65 3.25
249	53	Sassafras Sweet Gum Total	12 4 16	275.2 16.4 291.6	1.7 0.15 1.85
249	54	Sweet Gum Tree of Heaven Total	2 1 3	6.5 13.1 19.6	0.01 0.2 0.21
249	55	Persimmon Sweet Gum Misc. Frag. Total	53 1 - 54	763.3 3.3 117.9 884.5	5.0 0.05 1.4 6.45
249	57	Sweet Gum Misc. Frag. Total	9 - 9	26.2 6.5 32.7	0.35 0.1 0.45

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
249	58	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	1 5 · 3 - 9	3.3 36.0 16.4 19.7 75.4	0.1 0.3 0.15 0.15
249	59	American Elm Black Cherry Persimmon Misc. Frag. Total	3 1 11 - 15	22.9 3.3 78.6 60.0 164.8	0.3 0.01 0.7 0.7 1.71
249	60	American Elm Cherry Red Maple Sassafras Sweet Gum Tulip Misc. Frag.	7 1 4 1 9 33 -	26.2 3.3 36.0 29.5 104.8 950.0 72.1	0.2 0.01 0.3 0.4 0.9 5.8 0.9
253	1	Chestnut Oak Tupelo Misc. Frag. Total	1 14 - 15	32.8 216.2 72.1 321.1	0.55 2.1 0.8 3.45
253	2	Tupelo White Oak Misc. Frag. Total	8 3 - 11	75.3 42.6 6.5 124.4	0.7 0.55 0.05 1.30
253	3	Spanish Oak Tupelo Misc. Frag. Total	2 11 -	19.7 104.8 29.5 154.0	0.3 0.85 0.2 1.35
253	4	Pin Oak Red Maple Tupelo White Oak Misc. Frag. Total	1 2 7 2 -	32.8 49.1 111.4 39.3 45.9 278.5	0.5 0.4 0.9 0.45 0.5 2.75

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of	Box	Chaoine	of Leaves	Area (cm²)	Weight
1974	Number	Species	Leaves		(g)
253	5	Beech	2	19.7	0.1
		Tupelo	8	88.4	1.0
		Misc. Frag.	, ,	29.5	0.3
		Total	10	137.6	1.4
253	6	Tupelo	24	347.3	2.8
200	0	White Oak	3	39.3	0.5
		Misc. Frag.		45.9	0.5
	ann aige - Mainte Ann aige an Aige an Aige an Aige an Aige ann aige an Aige an Aige ann aige ann aige ann aige	Total	27	432.5	3.8
253	7	Black Oak	1	42.6	0.5
233	/	Dogwood	i	26.2	0.2
		Tupelo	12	190.0	1.8
		Misc. Frag.	-	39.3	0.4
		Total	14	298.1	2.9
253	8	Black Oak	2	55.7	0.8
200	0	Tupelo	2 2	13.1	0.1
		Virginia Pine	14	9.8	0.2
		White Oak	i	13.1	0.2
		Misc. Frag.	<b>an</b>	13.1	0.3
		Total	19	104.8	1.6
253	9	Red Maple	_ 1	26.2	0.05
		Tupelo	21	262.1	2.3
		White Oak	3	45.9	0.45
		Misc. Frag.	••	62.2	0.65
		Total	25	396.4	3.45
253	10	Tupelo	7	78.6	0.55
	-	Misc. Frag.	and .	32.8	0.3
		Total .	7	711.4	0.85
253	41	Sour Cherry	74	386.6	2.5
		Sweet Cherry	16	232.6	1.4
		Misc. Frag.	-	52.4	0.35
		Total	90	671.6	4.25
253	42	American Elm	1	3.3	0.01
		Sour Cherry	2	3.3	0.06
		Sweet Cherry	33	183.5	2.7
		Tulip Poplar	1	19.7	0.35
CWITA-The represent the Monthstone		Misc. Frag.		26.2	0.25
		Total	37	236.0	3.37

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
253	43	Persimmon Sour Cherry Sweet Cherry Misc. Frag. Total	2 22 9 - 33	13.1 114.7 91.7 65.5 285.0	0.15 0.8 0.85 0.7 2.5
253	44	Persimmon Sour Cherry Sweet Cherry Misc. Frag. Total	54 30 11 - 95	363.6 137.6 75.3 111.4 687.9	3.9 1.02 0.9 1.4 7.22
253	45	Black Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	84 3 2 - 89	373.5 32.8 49.1 45.9 501.3	3.45 0.6 0.56 0.6 5.21
253	46	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	1 9 29 - 39	13.1 65.5 307.9 65.5 452.0	0.2 0.7 3.6 0.8
253	47	Black Cherry Sweet Gum Misc. Frag. Total	28 11 - 39	176.9 85.2 45.9 308.0	1.45 1.1 0.7 3.25
253	48	Sweet Gum Tulip Poplar Misc. Frag. Total	5 21 - 26	52.4 622.4 19.7 694.5	0.5 6.6 0.25 7.35
253	49	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	7 4 2 -	39.3 36.0 19.7 59.0	0.4 0.3 0.2 0.8
253	50	Sour Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	109 4 1 -	298.1 45.9 9.8 39.3 393.1	2.5 0.6 0.1 0.4 3.6

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
254	31	Beech Pin Oak Tulip Poplar Total	9 1 · 1	163.8 13.1 26.2 203.1	1.1 0.1 0.15 1.35
254	32	Beech	5	62.2	0.65
254	33	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	5 1 1 -	68.8 9.8 26.2 26.2	0.5 0.15 0.3 0.2
254	34	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	8 1 4 -	108.1 13.1 91.7 16.4 229.3	0.8 0.2 0.8 0.2 2.0
254	35	Beech Hornbeam Tulip Poplar Total	3 2 6 11	49.1 6.5 62.2 117.8	0.3 0.01 0.4 0.71
254	36	Beech Tulip Poplar Misc. Frag. Total	2 11 - 13	45.9 340.7 85.2 471.8	0.3 2.2 0.8 3.3
254	37	Beech Oak Spanish.Oak Total	3 - 2 5	22.9 26.2 39.3 88.4	0.1 0.7 0.6
254	38	Virginia Pine Misc. Frag. Total	24 - 24	6.5 29.5 36.0	0.3 0.25 0.55
254	39	American Elm Dogwood Spanish Oak Tulip Poplar Misc. Frag. Total	1 2 1 10 -	6.5 26.2 19.7 167.1 6.5 226.0	0.05 0.1 0.2 0.9 0.01

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
254	40	Beech Misc. Frag. Total	2 	9.8 36.0 45.8	0.01 0.3 0.31
254	79	Black Willow	4	6.5	0.05
255	11	Dogwood Hickory Sweet Gum Tulip Poplar Misc. Frag. Total	2 3 1 7 -	62.2 42.6 26.2 281.7 32.8 445.5	0.25 0.49 0.1 1.7 0.35 2.89
255	12	Beech Dogwood Tulip Poplar Tupelo Misc. Frag. Total	1 1 2 6 -	19.7 6.5 91.7 101.6 52.4 271.9	0.06 0.05 0.5 0.7 0.65 1.96
255	13	Beech Sycamore Tulip Poplar Misc. Frag. Total	1 - 8 - 9	13.1 9.8 157.2 13.1 193.2	0.05 0.01 1.0 0.2 1.26
255	14	Beech Tulip Poplar Misc. Frag. Total	4 1 - 5	45.9 6.5 49.1 101.5	0.35 0.01 0.4 0.76
255	15	Dogwood Hornbeam Sweet Gum Total	2 2 3 7	22.9 19.7 65.5 108.1	0.02 0.1 0.8 0.92
255	16	Dogwood Hornbeam Spanish Oak Sweet Gum Misc. Frag. Total	1 36 1 2 - 40	9.8 104.8 3.3 39.3 26.2 183.4	0.06 0.45 0.01 0.7 0.25

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
255	17	Dogwood Hornbeam Sweet Gum Virginia Pine Misc. Frag. Total	2 . 4 . 2 16  24	36.0 16.4 6.5 9.8 9.8 78.5	0.15 0.01 0.01 0.25 0.15
255	18	Dogwood Misc. Frag. Total	1 	9.8 49.1 58.9	0.01 0.6 0.61
255	19	Dogwood Tulip Poplar White Oak Misc. Frag. Total	2 1 2 - 5	29.5 13.1 32.8 19.7 95.1	0.05 0.02 0.3 0.1 0.47
255	20	Cherry Dogwood Sweet Gum Tupelo Misc. Frag. Total	1 1 4 51 - 57	6.5 3.3 32.8 743.6 65.5	0.1 0.01 0.25 5.75 1.0 7.11
255	61	Persimmon Red Maple Sweet Gum Virginia Pine Misc. Frag. Total	11 1 2 4 -	59.0 6.5 6.5 3.3 39.3	0.65 0.05 0.02 0.04 0.5
255	62	0ak		49.1	0.5
255	63	Black Cherry Black Walnut Virginia Pine Total	1 20 1 22	6.5 68.8 3.3 78.6	0.01 1.3 0.01 1.32
255	64	Sour Cherry Sweet Gum Virginia Pine Total	4 3 2 9	19.7 13.1 3.3 36.1	0.1 0.15 0.01 0.26

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
255	66	Black Cherry	14	78.6	0.6
200	00	Persimmon		32.8	0.25
		Total	·14	111.4	0.85
		TOTAL	17	111.7	0.03
255	67	Persimmon	4	16.4	0.15
255	07		1	22.9	0.13
***************************************		Sweet Gum	· 5		
		Total	5	39.3	0.35
055	60	D 1 M 7	_	FF 7	0.0
255	68	Red Maple	5	55.7	0.3
		Sour Cherry	40	176.9	0.8
		Virginia Pine	2	3.3	0.01
		Misc. Frag.		29.5	0.1
		Total	47	265.4	1.21
255	70	American Elm	1	9.8	0.01
		Sour Cherry		9.8	0.01
		Sweet Gum	3 5	59.0	0.75
		Virginia Pine	4	9.8	0.48
		Misc. Frag.		13.1	0.25
****	2 - 1	Total	13	101.5	1.5
		TOTAL	13	101.5	1.5
256	21	American Elm	11	91.7	0.9
230		American Emi		91.7	0.9
256	22	Amariaan Flm	10	172 6	2.2
256	22	American Elm	13	173.6	2.3
****		Black Cherry	1	9.8	0.1
		Total	14	183.4	2.4
256	23	American Elm	23	347.3	2.6
256	24	American Elm	24	235.9	2.9
		Black Walnut	4	22.9	0.5
		Misc. Frag.	-	85.2	1.3
		Total	28	344.0	4.7
256	25	American Elm	3	39.3	0.6
		Black Walnut	17	114.7	2.3
demonstration		Total	20	154.0	2.9
		10001		101.0	L. J
256	26	American Elm	5	68.8	0.6
200	20	Black Cherry	29	170.3	1.4
		Sweet Gum	<i>29</i>		
				9.8	0.2
		Misc. Frag.	- 2E	29.5	0.35
		Total	35	278.4	2.55

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
256	27	American Elm Misc. Frag. Total	33 - 33	317.8 13.1 330.9	3.15 0.3 3.45
256	28	American Elm Black Walnut Total	15 2 17	147.4 9.8 157.2	1.6 0.05 1.65
256	29	American Elm	25	209.7	1.9
256	30	American Elm Black Walnut Total	6 5	68.8 19.7 88.5	0.9 0.3 1.2
256	51	Black Cherry	1	3.3	0.01
256	52	Dogwood Persimmon Misc. Frag. Total	5 28 - 33	81.9 193.3 85.2 360.4	0.7 2.55 1.4 4.65
256	53	Sassafras	2	29.5	0.3
256	55	Persimmon Sweet Gum Misc. Frag. Total	52 1 - 53	727.3 3.3 85.2 815.8	6.2 0.1 1.1 7.4
256	57	Sweet Gum	4	6.5	0.2
256	58	Sweet Gum	1	3.3	0.01
256	59	American Elm Persimmon Misc. Frag. Total	1 25 - 26	13.1 219.5 81.9 314.5	0.05 2.0 0.9 2.95
256	60	American Elm Sweet Gum Tulip Poplar Misc. Frag. Total	1 9 12 - 22	3.3 91.7 298.1 6.5 399.6	0.01 0.75 2.2 0.07 3.03

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
260	1	Tupelo White Oak Misc. Frag. Total	34 . 1  . 35	455.4 19.7 68.8 543.9	5.3 0.5 0.85 6.65
260	2	Oak Tupelo Total	- 13 13	13.1 137.6 150.7	0.2 1.4 1.6
260	3	Pin Oak Spanish Oak Tupelo White Oak Total	1 4 28 4 37	42.6 52.4 321.0 52.4 468.4	0.8 1.1 3.1 0.6
260	4	Black Oak Red Maple Tupelo White Oak Misc. Frag. Total	3 1 23 2 - - 29	121.2 3.3 396.4 16.4 117.9 655.2	1.6 0.05 3.8 0.4 1.4 7.25
260	5	Tupelo Misc. Frag. Total	19 - 19	245.7 62.2 307.9	2.1 0.65 2.75
260	6	Black Oak Tupelo White Oak Misc. Frag. Total	2 35 10 - 47	72.1 399.7 327.6 88.4 887.8	1.8 3.5 4.6 1.1
260	7	Dogwood Black Oak Blackjack Oak Oak Red Maple Tupelo Virginia Pine Total	5 1 1 - 1 1 1	65.5 32.8 16.4 45.9 32.8 6.5 3.3	0.5 0.5 0.3 0.1 0.5 0.15 0.1
260	8	Tupelo Misc. Frag. Total	5 - 5	59.0 19.7 78.7	0.6 0.4 1.0

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm²)	(g)
260	9	Tupelo	28	376.7	3.3
		White Oak	1	26.2	0.45
		Misc. Frag.	'-	55.7	0.8
		Total	<b>2</b> 9	458.6	4.55
260	10	Tupelo	17	183.4	1.8
		White Oak	1	6.5	0.1
		Misc. Frag.	-	52.4	0.9
		Total	18	242.3	2.8
260	41	Black Cherry	51	278.5	2.4
		Sweet Cherry	27	288.3	2.3
		Misc. Frag.	- 78	95.0	1.0
		Total	76	661.8	5.7
260	42	Sweet Gum	71	478.2	8.5
260	43	Black Cherry	21	124.5	0.8
		Red Maple	1	3.3	0.01
		Sweet Gum	15	124.5	1.6
		Misc. Frag.	37	22.9	0.2
		Total	37	275.2	2.61
260	44	Black Cherry	28	131.0	0.8
		Black Oak	1	9.8	0.05
		Persimmon	80	658.5	5.6
		Sweet Gum Misc. Frag.	2	19.7 275.2	0.1 3.6
		Total	111	1094.2	10.15
•••					
260	45	Black Cherry	121	737.1	6.3
		Sweet Gum	6	32.8	0.6
		Tulip Poplar Misc. Frag.	_'	45.9 65.5	0.5 1.0
		Total	128	881.3	8.4
260	46	Black Cherry	1	6 5	0.01
200	40	Persimmon	4	6.5 29.5	0.01 0.45
		Sweet Gum	63	520.9	6.75
		Misc. Frag.	-	42.6	0.7
		Total	68	599.5	7.91

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
260	47	Black Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	46 19 · 1 - - 66	435.7 101.6 13.1 95.0 645.4	4.5 1.8 0.01 2.0 8.31
260	48	Sweet Gum Tulip Poplar Total	9 14 23	65.5 285.0 350.5	0.75 3.6 4.35
260	49	Black Cherry Sweet Gum Misc. Frag. Total	8 10 - 18	45.9 39.3 49.1 134.3	0.3 0.5 0.7 1.5
260	50	Black Cherry Sweet Gum Misc. Frag. Total	192 8 - 202	658.5 55.7 22.9 737.1	6.0 0.8 0.2 7.0
261	31	Beech Misc. Frag. Total	2 - 2	19.7 6.5 26.2	0.3 0.2 0.5
261	32	Beech Dogwood Sweet Gum Tulip Poplar Misc. Frag. Total	6 1 2 1 -	55.7 9.8 22.9 6.5 13.1	0.75 0.05 0.4 0.1 0.2
261	33	Beech Hickory Sweet Gum Tulip Poplar Misc. Frag. Total	3 1 1 1 -	32.8 26.2 26.2 26.2 22.9	0.2 0.4 0.5 0.45 0.4 1.95
261	34	Beech Tulip Poplar Tupelo Total	7 8 1 16	140.9 209.7 19.7 370.3	0.8 2.0 0.2 3.0

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
261	35	Beech	3	32.8	0.3
201	00	Hornbeam	3 3 · 3	9.8	0.1
		Tulip Poplar	. 3	68.8	0.8
		Misc. Frag. Total	9	9.8 121.2	0.1
	•				
261	36 .	Beech Tulip Poplar	2 10	13.1 180.2	0.05
		Misc. Frag.	-	39.3	0.3
		Total	12	232.6	2.00
261	37	Sweet Gum	1	16.4	0.2
		Tulip Poplar Misc. Frag.	2	72.1 19.7	0.5 0.1
		Total	3	108.2	0.1
061	20		2		
261	38	Beech	3	59.0	0.6
261	39	Dogwood	4	32.8	0.25
		Tulip Poplar	3	26.2 32.8	0.3 0.4
		Misc. Frag. Total	7	91.8	0.95
207	40	D h	2	12.1	0.1
261	40	Beech Sweet Gum	2	13.1 19.7	0.1 0.35
		Misc. Frag.	-	6.5	0.15
		Total	5	39.3	0.60
261	74	Red Maple	1	6.5	0.1
261	76	Black Willow	3	3.3	0.15
201	77	Dia ale Charres	7	C F	
261	77	Black Cherry Red Maple	1	6.5 19.7	0.01 0.3
	P-00-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0	Total	2	26.2	0.3
262	11	Dogwood	1	13.1	0.1
		Red Maple	1	9.8	0.1
		Sweet Gum Tulip Poplar	2 10	3.3 311.2	0.05 3.1
		Misc. Frag.	-	32.8	0.4
		Total	14	370.2	3.75

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
262	12	Dogwood Sweet Gum Tulip Poplar Tupelo Misc. Frag. Total	2 1 2 12 - 17	13.1 6.5 88.4 111.4 22.9 242.3	0.05 0.05 0.7 1.2 0.3 2.3
262	13	Dogwood Tulip Poplar Total	2 7 9	13.1 124.5 137.6	0.1 1.5 1.6
262	14	Dogwood Tulip Poplar White Oak Misc. Frag. Total	1 2 4 - 7	13.1 52.4 55.7 29.5	0.09 0.7 0.8 0.6 2.19
262	15	Dogwood Hornbeam Red Maple Sweet Gum Virginia Pine Misc. Frag.	4 6 3 25 8 -	68.8 29.5 36.0 327.6 3.3 36.0	0.7 0.2 0.4 4.0 0.1 0.6 6.0
262	16	Dogwood Hornbeam Sweet Gum White Oak Misc. Frag. Total	9 22 4 4 - 39	144.1 81.9 68.8 45.9 72.1 412.8	0.9 0.4 1.5 0.75 0.75 4.3
262	17	Black Oak Dogwood Hornbeam Sweet Gum Tupelo White Oak Misc. Frag.	7 11 21 2 3 2 -	239.1 124.5 52.4 22.9 36.0 26.2 29.5	3.4 0.8 0.25 0.4 0.3 0.65 0.6
262	18	Dogwood Spanish Oak Sweet Gum Total	62 3 6 71	1035.2 42.6 91.7 1169.5	9.1 0.75 1.5 11.35

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
262	19	Dogwood Spanish Oak Tulip Poplar Misc. Frag. Total	9 . 1 . 1 - 11	104.8 13.1 9.8 32.8 160.5	0.9 0.35 0.2 0.5 1.95
262	20	Dogwood Spanish Oak Sweet Gum Tupelo Misc. Total	1 2 2 68 - 73	13.1 13.1 13.1 697.8 42.6 779.7	0.01 0.3 0.2 8.9 0.75
262	61	Persimmon Misc. Frag. Total	22 - 22	144.1 180.2 324.3	2.2 2.8 5.0
262	62	Black Oak Pin Oak Red Maple Misc. Frag. Total	8 12 1 -	111.4 111.4 22.9 85.2 330.9	1.3 1.5 0.2 1.1 4.1
262	63	Black Cherry Black Walnut Total	9 18 27	65.5 65.5 131.0	0.6 1.65 2.25
262	64	Black Cherry Sweet Gum Total	3 22 25	42.6 239.1 281.7	0.5 2.8 3.3
262	66	Black Cherry Misc. Frag. Total	16 - 16	88.4 19.7 108.1	1.0 0.4 1.4
262	67	American Elm Persimmon Red Maple Misc. Frag. Total	1 13 15 - 29	9.8 59.0 219.5 127.8 416.1	0.1 0.9 2.0 2.75 5.75

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
262	68	Black Cherry Black Oak Spanish Oak Misc. Frag. Total	18 2 1 -	95.0 52.4 9.8 29.5 186.7	0.65 0.45 0.05 0.3
262	69	Black Cherry	5	39.3	0.6
262	70	Black Cherry Sweet Gum Misc. Frag.	5 2 —	19.7 16.4 6.5	0.2 0.2 0.05
263	21	Total American Elm	7 19	42.6 206.4	0.45 2.85
263	22	American Elm Black Cherry	51 16	560.2 65.5	6.9
263	23	Total American Elm Misc. Frag.	67 49 -	625.7 583.1 124.5	7.6 4.9 1.2
263	24	Total American Elm Black Walnut Misc. Frag.	49 64 43	707.6 507.8 222.8 111.4	6.1 6.9 4.35 2.4
263	25	Total  American Elm Black Walnut Misc. Frag.	107 10 25 -	842.0 124.5 134.3 39.3	13.65 1.8 3.7 0.9
263	26	Total  American Elm Black Cherry Misc. Frag.	35 8 38 -	298.1 81.9 265.4 39.3	6.4 1.1 2.45 0.6
263	27	Total American Elm	46 74	386.6 688.0	4.15 9.2
263	28	American Elm Black Walnut Total	22 3 25	209.7 6.5 216.2	2.4 0.25 2.65

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
263	29	American Elm Black Walnut	158 2	1382.5 6.5	15.8 0.2
		Total	160	1389.0	16.0
263	30	American Elm Black Walnut Total	32 1 33	406.2 6.5 412.7	5.1 0.2 5.3
		10141	33	412.7	3.3
263	52	Dogwood Persimmon Misc. Frag.	44 53	399.7 344.0 160.5	5.1 6.3 3.45
**************************************		Total	97	904.2	14.85
263	53	Persimmon	105	940.2	3.7
263	54	Tree of Heaven	1	16.4	0.3
263	57	Sweet Gum	9	26.2	0.5
263	58	Black Cherry Persimmon Sweet Gum	2 11 5	9.8 127.8 13.1	0.1 1.9 0.3
		Total	18	150.7	2.3
263	59	American Elm Black Cherry Persimmon	15 2 32	75.3 6.5 180.2	1.3 0.1 2.6
		Sweet Gum	1	9.8	0.1
		Misc. Frag. Total	50	59.0 330.8	1.0 5.1
263	60	American Elm Sassafras Sweet Gum	4 2 37	13.1 32.8 304.7	0.25 0.5 3.68
		Tulip Poplar	25	507.8	5.8
		Total	68	858.4	10.23
267	1	Black Oak Chestnut Oak Tupelo	2 1 16	65.5 19.7 216.2	1.0 0.55 2.9
		White Oak	2	22.9	0.5
the same of the same of the same of		Misc. Frag. Total	21	55.7 380.0	1.15 6.1

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
267	2	Spanish Oak Tupelo White Oak Misc. Frag. Total	2 10 · 2 - 14	19.7 111.4 19.7 176.9 327.7	0.45 1.35 0.45 4.4 6.65
267	3	Dogwood Spanish Oak Tupelo White Oak Total	3 6 44 4 57	26.2 85.2 380.0 42.6 534.0	0.2 1.7 4.4 0.75 7.05
267	4	Black Oak Tupelo White Oak Misc. Frag. Total	3 26 1 - 30	147.4 406.2 13.1 62.2 628.9	2.6 4.0 0.2 0.9
267	5	Beech Black Oak Pin Oak Sweet Gum Tupelo White Oak Misc. Frag.	2 2 1 2 18 1 -	29.5 52.4 39.3 13.1 163.8 16.4 91.7	0.3 1.0 1.1 0.2 1.7 0.4 1.5
267	6	Beech Black Oak Sweet Gum Tupelo White Oak Misc. Frag.	1 1 1 36 2	9.8 49.1 6.5 389.8 9.8 81.9	0.05 0.7 0.1 4.1 0.2 1.55
267	7	Black Oak Dogwood Tupelo White Oak Misc. Frag. Total	3 9 5 1 -	124.5 111.4 42.6 13.1 75.3 366.9	2.1 0.85 0.7 0.4 1.5 5.55
267	8	Black Oak Tupelo Virginia Pine Total	4 6 23 33	68.8 85.2 6.5 160.5	1.1 1.0 0.5 2.6

			No. under a co	Land Company	D
Day of	Day		Number of	Leaf Surface	Dry
Day of	Box	Chaoise		Area (cm²)	Weight
1974	Number	Species	Leaves	(CIII-)	(g)
267	9	Beech	1	13.1	0.1
207	3	Red Maple	3	26.2	0.45
		Tupelo	. 29	366.9	3.45
		White Oak	2	13.1	0.3
		Misc. Frag.		42.6	0.6
		Total	35	461.9	4.9
		10001		101.5	
267	10	Chestnut Oak	1	6.5	0.2
		Tupelo	25	307.9	2.75
		White Oak	1	13.1	0.2
		Misc. Frag.	-	52.4	0.8
		Total	27	379.9	3.95
007	4.7	Dia ale Chaman	C1	004.0	2.0
267	41	Black Cherry	61	294.8	3.0
		Persimmon	10	32.8	0.75
		Sweet Cherry	37	458.6	4.2
		Sweet Gum	2	6.5	0.2
		Misc. Frag.	110	170.3	2.4
		Total	110	963.0	10.55
267	42 .	Black Cherry	2	6.5	0.2
		Sweet Gum	95	586.4	10.65
		Total	97	592.9	10.85
267	43	Plack Champy	14	65 5	0.0
207	43	Black Cherry Persimmon	7	65.5	0.9
		Sweet Gum	10	52.4 52.4	0.9 0.9
		Misc. Frag.	10	36.0	0.9
		Total	31	206.3	3.6
		10 00 1	31	200.5	3.0
267	44	Black Cherry	39	144.1	1.6
		Black Oak	2	19.7	0.35
		Persimmon	126	927.1	17.0
		Sweet Gum	21	134.3	2.8
		Tulip Poplar	1	13.1	0.1
		Misc. Frag.		226.0	4.65
		Total	189	1464.3	26.5
267	45	Black Cherry	148	825.5	8.8
207	7.5	Black Oak	2	22.9	0.5
		Sweet Gum	15	88.4	1.8
		Tulip Poplar	4	42.6	0.7
		Misc. Frag.	_	95.0	1.9
	×=	Total	169	1074.4	13.7
			. 55		

Forest Ecology Litter Box Data - 1974

(manufacture 1)			Number	Leaf Surface	Dry
Day of	Box		of.	Area	Weight
1974	Number	Species	Leaves	(cm²)	(g)
267	46	Black Cherry Persimmon Sweet Gum Tulip Poplar Misc. Frag. Total	2 25 60 1 -	9.8 160.5 386.6 55.7 160.5 773.1	0.1 2.8 7.4 0.7 3.55 14.55
267	47	Black Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	105 41 3 - 149	783.0 275.2 22.9 111.4 1192.5	8.5 5.65 0.3 2.7 17.15
267	48	Persimmon Sweet Gum Tulip Poplar Misc. Frag. Total	2 13 17 - 32	16.4 117.9 242.4 19.7 369.4	0.35 1.7 3.35 0.4 5.8
267	49	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	29 2 22 - 53	131.0 19.7 101.6 78.6 330.9	1.55 0.3 2.23 2.15 6.23
267	50	Black Cherry Persimmon Sweet Gum Total	374 6 22 402	1294.0 52.4 140.9 1487.3	14.5 0.9 3.3 18.7
268	31	Beech Spanish Oak Sweet Gum Tulip Poplar Misc. Frag. Total	13 1 2 2 2 -	154.0 9.8 29.5 13.1 42.6 249.0	1.2 0.15 0.5 0.1 0.75 2.7
268	32	Beech Dogwood Spanish Oak Sweet Gum Tulip Poplar White Oak Misc. Frag.	9 3 3 3 2 1 -	114.7 36.0 22.9 16.4 55.7 36.0 16	1.55 0.35 0.55 0.3 0.45 0.75 0.25

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of	Box		0f	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
	1101110-01	000100			\3/
268	33	Beech	7	88.4	0.6
		Dogwood	1	6.5	0.05
		Hickory	. 1	26.2	0.45
		Tulip Poplar	2	42.6	0.35
		Misc. Frag.	_	32.8	0.7
		Total	11	196.5	2.15
268	34	Beech	2	13.1	0.1
_0-		Dogwood	2 1	9.8	0.05
		Spanish Oak	2	39.3	0.75
		Tulip Poplar	_ 1	9.8	0.1
		Misc. Frag.	-	72.1	1.0
	100 200 200 200 11	Total	6	144.1	2.0
268	35	Beech	6	78.6	0.8
200	33	Hornbeam	7	22.9	0.06
		Sweet Gum	3	45.9	0.9
		Tulip Poplar	6 7 3 3	9.8	0.2
		Misc. Frag.	_	42.6	0.7
***************************************	······································	Total	19	199.8	2.66
268	36	Dooch	5	72.1	0.45
200	30	Beech Tulip Poplar	13	186.7	2.55
		Tupelo	13	9.8	0.1
		Misc. Frag.	_ '	36.0	1.0
		Total	19	304.6	4.1
		10001	13	301.0	
268	37	Beech	12	131.0	1.2
		Spanish Oak	3	26.2	0.45
		Sweet Gum	4	95.0	1.2
		Total	19	252.2	2.85
268	38	Beech	8	85.2	0.8
200	30	White Oak	5	68.8	1.3
		Misc. Frag.	_	13.1	0.3
	tagatan ayan da ayan d	Total	13	167.1	2.4
268	39	Beech	2	20.2	0.4
2 00	39	Dogwood	2 1	39.3 9.8	0.4 0.05
		Tulip Poplar		55.7	0.05
		Tupelo	4 6	75.3	0.65
		Misc. Frag.	_	22.9	0.4
		Total	13	203.0	2.05
		10001	13	200.0	2.00

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
268	40	Beech Sweet Gum Tupelo Total	4 4 · 4 12	42.6 49.1 42.6 134.3	0.45 0.8 0.7
268	73	Black Willow	_	3.3	0.01
268	74	Misc. Frag.	_	6.5	0.1
268	76	Black Willow	_	3.3	0.1
268	77	Spanish Oak	1	13.1	0.3
268	79	Black Willow	8	6.5	0.25
268	80	Black Oak	2	9.8	0.2
269	11	Dogwood Red Maple Sweet Gum Tulip Poplar Misc. Frag. Total	3 2 2 15 	42.6 19.7 9.8 311.2 26.2 409.5	0.2 0.2 0.2 3.8 0.65
269	12	Loblolly Pine Spanish Oak Sweet Gum Tupelo Virginia Pine Misc. Frag.	3 4 7 43 3 -	6.5 42.6 95.0 317.8 3.3 49.1	0.1 1.0 1.85 4.5 0.1 1.0
269	13	Beech Dogwood Sweet Gum Tulip Poplar Misc. Frag. Total	5 9 1 4 -	32.8 104.8 22.9 147.4 16.4 324.3	0.25 0.8 0.3 1.9 0.4 3.65
269	14	Beech Spanish Oak Tulip Poplar White Oak Misc. Frag. Total	3 1 2 5 -	29.5 9.8 29.5 45.9 9.8	0.5 0.2 0.2 0.6 0.3

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
269	15	Beech Dogwood Sweet Gum Misc. Frag. Total	5 4 14 - 23	59.0 52.4 163.8 42.6 317.8	0.7 0.6 2.75 0.65
269	16	Beech Black Oak Black Walnut Dogwood Hornbeam Spanish Oak Sweet Gum Virginia Pine Misc. Frag.	5 1 5 7 33 2 5 14	65.5 32.8 16.4 52.4 59.0 39.3 39.3 39.3 3.3 26.2	0.6 0.4 0.4 0.4 0.5 0.85 0.6 0.25 1.2
269	17	Dogwood Hornbeam Spanish Oak Sweet Gum Tupelo White Oak Misc. Frag.	6 21 14 2 2 8 -	52.4 45.9 232.6 13.1 9.8 98.3 59.0	0.5 0.4 4.85 0.2 0.2 1.5 1.7
269	18	Dogwood Spanish Oak Sweet Gum Misc. Frag. Total	23 10 3 -	307.9 111.4 45.9 29.5 494.7	2.8 2.4 0.75 0.65 6.6
269	19	Dogwood Spanish Oak Sweet Gum Tupelo Total	13 1 5 1 20	183.5 13.1 59.0 9.8 265.4	2.4 0.3 0.85 0.15 3.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
269	20	Beech Black Oak Dogwood Spanish Oak Tulip Poplar Tupelo White Oak	2 1 5 1 2 6 2	13.1 19.7 72.1 6.5 52.4 88.4 22.9	0.15 0.6 0.5 0.1 0.5 1.55
		Misc. Frag.		32.8	0.5 1.1
269	61	Total Persimmon Red Maple Sweet Gum Misc. Frag. Total	23 1 2 - 26	307.9 137.6 13.1 19.7 65.5 235.9	5.0 2.85 0.2 0.4 1.4 4.85
269	62	Black Oak Oak Pin Oak Sycamore Total	13 - 5 1	108.1 59.0 49.1 62.2 278.4	2.0 1.0 0.85 1.0 4.85
269	63	Black Cherry Black Walnut Total	8 10 18	32.8 19.7 52.5	0.5 0.7 1.2
269	64	Black Cherry Red Maple Sweet Gum Misc. Frag. Total	4 1 10 - 15	9.8 13.1 101.6 22.9 147.4	0.2 0.2 1.9 0.57 2.87
269	66	Black Cherry Persimmon Total	25 6 31	124.5 42.6 167.1	1.7 0.8 2.5
269	67	American Elm Black Oak Persimmon Pin Oak Red Maple Sweet Gum Misc. Frag.	7 2 18 2 8 2 -	91.7 45.9 117.9 26.2 91.7 6.5 29.5	2.0 0.7 2.5 0.4 1.0 0.3 0.7

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
269	68	Black Cherry	41	150.7	1.3
		Black Oak	3	13.1	0.3
		Red Maple	• 24	252.2	3.8
		Total	68	416.0	5.4
269	69	Black Cherry	4	29.5	0.65
269	70	American Elm	2	3.3	0.2
203	70	Black Cherry	າ້າ	42.6	0.6
		Persimmon	i	6.5	0.15
		Sweet Gum	15	85.2	2.2
		Total	29	137.6	3.15
270	21	American Elm	60	409.5	6.8
		Misc. Frag.	-	32.8	1.0
		Total	60	442.3	7.8
270	22	American Elm	35	163.8	3.55
-, -		Black Cherry	5	32.8	0.4
		Misc. Frag.	-	68.8	1.4
		Total	40	265.4	5.35
270	23	American Elm	41	553.6	5.05
270	24	American Elm	70	583.1	8.65
		Black Walnut	32	163.8	7.6
		Total	102	746.9	16.25
270	25	American Elm	7	68.8	1.3
		Black Walnut	62	294.8	4.6
		Total	69	363.6	5.9
270	26	American Elm	14	167.1	2.7
270	20	Black Cherry	36	216.2	2.4
		Sweet Gum		6.5	0.05
		Tulip Poplar	2 1	6.5	0.05
		Total	53	396.3	5.2
270	27	American Elm	60	527.4	8.2
270	28	American Elm	34	262.1	3.35
	20	American cim	34	۷۷۷.۱	3.33
270	29	American Elm	76	615.9	8.35

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
-1371	Tunio	<u> </u>	200,100		
270	30	American Elm	51	412.8	5.9
2.0		Black Walnut	10	45.9	1.3
		Total	61	458.7	7.2
270	51	Black Cherry	2	3.3	0.1
		Sweet Gum	1	6.5	0.15
		Total	3	9.8	0.25
270	52	Dogwood	19	104.8	2.1
		Persimmon	56	366.9	7.1
4 .		Sassafras	4	45.9	0.6
mental mental mental principles of the second		Misc. Frag.	-	72.1	1.9
		Total	79	589.7	11.7
270	F2	Consessions	17	200.2	2 6
270	53	Sassafras	17	288.3	2.6
270	54	Sweet Gum	1	3.3	0.05
270	54	Tree of Heaven	9	72.1	2.1
The State of the S		Total	10	75.4	2.15
		10001	10	70.1	2.10
270	55	Persimmon	69	861.6	10.5
		Sweet Gum	1	3.3	0.01
Participant and the second sec		Total	70	864.9	0.51
270	56	Persimmon	1	3.3	0.15
270	57	Sweet Gum	***	26.2	0.7
070	50	D7 L OL	0	40.7	0.0
270	58	Black Cherry	9	49.1	0.8
		Persimmon	9 5 8	58.7	1.4
		Sweet Gum	0	108.1 36.0	1.0
		Misc. Frag. Total	22	251.9	0.65 3.85
		10 ca 1	22	231.3	3.03
270	59	American Elm	1	13.1	0.35
		Black Cherry	10	39.3	0.5
		Persimmon	31	203.1	2.6
		Spanish Oak	1	13.1	0.2
		Misc. Frag.	_	32.8	0.85
		Total	43	301.4	4.5
090		A	_		
270	60	American Elm	5	36.0	0.5
		Sweet Gum	13	117.9	1.55
		Tulip Poplar	8	183.5	2.0
		Misc. Frag.	-	29.5	0.55
		Total	26	366.9	4.6

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
274	1	Black Oak Tupelo White Oak Misc. Frag. Total	1 31 · 4 - 36	26.2 419.3 45.9 26.2 517.6	0.5 5.3 0.9 0.4 7.1
274	2	Spanish Oak Tupelo White Oak Misc. Frag. Total	1 10 9 - 20	13.1 108.1 68.8 52.4 242.4	0.7 1.5 1.2 0.75 4.15
274	3	Black Oak Dogwood Spanish Oak Tupelo White Oak Misc. Frag.	1 4 1 40 3	16.4 52.4 16.4 442.3 49.1 52.4	0.2 0.65 0.7 4.6 0.6 0.8
274	4	Total  Beech Black Oak Tupelo White Oak Total	49 2 2 28 3 35	629.0 13.1 32.8 393.1 19.7 458.7	7.55 0.1 0.5 4.1 0.4 5.1
274	5	Black Oak Red Maple Tupelo White Oak Misc. Frag.	8 1 21 1 -	101.6 3.3 206.4 6.5 29.5	1.8 0.1 3.1 0.1 0.7 5.8
274	6	Beech Red Maple Sweet Gum Tupelo White Oak Misc. Frag. Total	1 1 1 50 1	3.3 9.8 26.2 514.3 62.2 45.9	0.02 0.6 0.3 6.3 0.9 0.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
274	7	Dogwood Oak Spanish Oak Tupelo White Oak Total	13 - - 4 1 4	131.0 19.7 108.1 3.3 52.4 314.5	1.2 0.5 1.5 0.15 - 3.35
274	8	Red Maple Tupelo Virginia Pine White Oak Total	1 7 6 3	26.2 65.5 3.3 26.2	0.3 1.0 0.2 0.5 2.0
274	9	Beech Chestnut Oak Tupelo Virginia Pine White Oak Misc. Frag. Total	1 2 30 7 3 -	13.1 39.3 255.5 3.3 32.8 65.5 409.5	0.1 0.65 3.4 0.1 1.2 1.1 6.55
274	10	Black Oak Chestnut Oak Spanish Oak Tupelo Misc. Frag. Total	4 1 2 21 -	131.0 16.4 26.2 183.6 26.2 383.4	2.3 0.3 0.5 2.6 0.6
274	41	Black Cherry Choke Cherry Persimmon Sweet Cherry Sweet Gum Tulip Poplar Misc. Frag.	30 12 3 42 5 1	170.3 78.6 22.9 399.7 26.2 19.7 29.5	2.3 0.8 0.55 4.7 0.6 0.15 0.55
274	42	Black Cherry Sweet Gum Total	5 83 88	13.1 330.9 344.0	0.2 8.7 8.9

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
274	43	Black Cherry Persimmon Red Maple Sweet Gum Misc. Frag. Total	25 6 1 5 -	91.7 75.3 6.5 22.9 52.4 248.8	1.1 1.45 0.05 0.5 1.0
274	44	Black Cherry Persimmon Sweet Gum Total	16 175 11 202	78.6 1238.3 65.5 1382.4	0.7 25.9 2.2 28.8
274	45	Black Cherry Pin Oak Sweet Gum Tulip Poplar Misc. Frag. Total	149 1 14 2 -	936.9 13.1 72.1 45.9 16.4	10.7 0.25 1.85 0.7 0.2
274	46	Persimmon Sweet Gum Misc. Frag. Total	37 55 - 92	196.7 393.1 101.6 691.4	3.6 8.3 2.05 13.95
274	47	Black Cherry Sweet Gum Tulip Poplar Misc. Frag. Total	105 22 1 -	838.7 121.2 6.5 55.7	10.0 3.1 0.05 1.15
274	48	Black Cherry Persimmon Sweet Gum Tulip Poplar Misc. Frag. Total	3 7 13 38 -	13.1 78.6 104.8 537.3 36.0 769.8	0.4 1.15 2.0 7.5 0.8
274	49	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	27 8 14 - 49	108.1 52.4 95.0 68.8 324.3	1.3 0.85 2.5 1.8 6.45

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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
274	50	Black Cherry Sweet Gum Tulip Poplar Total	187 15 1 203	596.2 91.7 16.4 704.3	7.65 1.9 0.2 9.75
275	31	Beech Spanish Oak Sweet Gum Tulip Poplar Virginia Pine Misc. Frag. Total	14 1 11 2 15 -	140.9 6.5 176.9 39.3 9.8 59.0	1.5 0.1 3.7 0.3 0.3 1.0
275	32	Beech Dogwood Spanish Oak Sweet Gum Tulip Poplar White Oak Misc. Frag.	13 3 2 4 4 1 -	163.8 42.6 26.2 39.3 124.5 19.7 26.2	1.3 0.3 0.35 0.9 1.9 0.5 0.4
275	33	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	8 2 1 -	49.1 32.8 26.2 78.6	0.4 0.7 0.4 1.1 2.6
275	34	Beech Dogwood Tulip Poplar Tupelo Misc. Frag. Total	15 1 6 3 -	183.4 9.8 65.5 36.0 39.3	1.5 0.01 0.8 0.45 0.7 3.46
275	35	Beech Hornbeam Tulip Poplar Virginia Pine Misc. Frag. Total	16 5 2 5 -	176.9 9.8 39.3 3.3 45.9 275.2	1.5 0.1 0.45 0.1 0.8

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
275	36	Beech Chestnut Oak Spanish Oak Sweet Gum Tulip Poplar Misc. Frag.	7 1 · 3 3 23 - 37	101.6 22.9 42.6 32.8 514.3 42.6	1.0 0.4 1.1 0.65 5.6 0.7 9.45
275	37	Beech Spanish Oak Sweet Gum Tulip Poplar Misc. Frag. Total	14 9 1 2 -	111.4 124.5 6.5 22.9 39.3	0.9 2.1 0.1 0.45 0.7 4.25
275	38	Beech Virginia Pine Misc. Frag. Total	12 9 - 21	111.4 3.3 26.2 140.9	1.3 0.15 0.9 2.35
275	39	Beech Black Oak Dogwood Spanish Oak Tulip Poplar Tupelo Misc. Frag. Total	6 7 5 4 5 8 -	45.9 442.3 52.4 85.2 88.4 114.7 42.6	0.45 8.7 0.45 1.6 0.8 1.1 0.75
275	40	Beech Hickory Spanish Oak Sweet Gum Tulip Poplar Tupelo White Oak Misc. Frag.	19 2 1 1 1 6 2 -	249.0 45.9 13.1 22.9 13.1 68.8 29.5 26.2 468.5	2.2 0.85 0.1 0.5 0.2 1.2 0.8 0.5
275	72	Black Willow	18	19.7	0.7
275	73	Black Willow	27	45.9	0.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
275	74	Choke Cherry Red Maple Total	1 10 11	6.5 108.1 114.6	0.01 1.4 1.41
275	76	Black Willow Sweet Gum Total	20 1 21	39.3 3.3 42.6	0.7 0.01 0.71
275	77	Choke Cherry Red Maple Sweet Gum Misc. Frag. Total	2 2 1 -	9.8 16.4 6.5 13.1 45.8	0.05 0.1 0.2 0.1 0.45
275	79	Black Willow Persimmon Red Maple Total	57 1 1 59	150.7 13.1 3.3 167.1	2.9 0.1 0.01 3.01
275	80	Persimmon	6	42.6	0.25
276	11	Black Oak Red Maple Sweet Gum Tulip Poplar Misc. Frag. Total	1 4 2 9 -	42.6 45.9 16.4 173.6 29.5	1.0 0.52 0.2 2.1 0.45 4.27
276	12	Beech Dogwood Hickory Red Maple Sweet Gum Tulip Poplar Tupelo White Oak	3 6 8 1 2 4 19 3	19.7 62.2 42.6 3.3 13.1 121.2 131.0 49.1	0.15 0.7 1.3 0.01 0.25 1.7 2.1 1.3 7.51
276	13	Beech Black Oak Dogwood Sweet Gum Tulip Poplar Misc. Frag. Total	5 1 20 7 7 7 -	65.5 22.9 176.9 42.6 104.8 29.5	0.5 0.6 1.9 1.5 1.8 0.6

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
276	14	Beech Black Oak Spanish Oak Tupelo White Oak Misc. Frag.	14 1 · 2 7 8	163.8 29.5 26.2 52.4 65.5 68.8 406.2	2.3 0.5 0.55 0.75 1.2 1.4 6.7
276	15	Beech Black Cherry Dogwood Hornbeam Red Maple Sweet Gum Tupelo Virginia Pine White Oak Misc. Frag.	2 9 9 1 17 2 45 5 -	19.7 9.8 91.7 29.5 26.2 167.1 6.5 19.7 52.4 52.4 475.0	0.3 0.1 1.0 0.3 0.35 3.1 0.1 0.65 1.1 1.5
276	16	Black Oak Dogwood Hornbeam Spanish Oak Sweet Gum White Oak Misc. Frag. Total	2 2 51 1 6 4 -	45.9 19.7 117.9 13.1 72.1 49.1 39.3	1.25 0.2 0.8 0.3 1.7 1.1 0.75
276	17	Beech Black Oak Dogwood Hornbeam Spanish Oak Sweet Gum White Oak Misc. Frag.	4 4 21 14 9 8 2	26.2 75.3 262.1 26.2 154.0 68.8 13.1 49.1	0.55 1.5 2.4 0.25 3.2 1.2 0.35 1.1
276	18	Black Oak Dogwood Spanish Oak Sweet Gum Total	3 22 17 2 44	95.0 249.0 157.2 13.1 514.3	2.2 2.6 2.8 0.2

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm2)	Dry Weight (g)
276	19	Beech Dogwood Sweet Gum Tupelo White Oak Misc. Frag.	1 7 7 2 2 3 —————————————————————————————	6.5 85.2 95.0 16.4 32.8 36.0	0.1 0.9 2.0 0.3 0.6 0.75
276	20	Total  Dogwood Spanish Oak Sweet Gum Tupelo Misc. Frag.	20 4 1 5 51 -	42.6 3.3 22.9 455.4 39.3 563.5	0.5 0.1 0.5 6.5 1.0
276	61	Total Persimmon Red Maple Sweet Gum Total	51 3 2 56	494.7 13.1 19.7 527.5	8.6 11.2 0.3 0.4
276	62	Black Cherry Black Oak Pin Oak Red Maple Sweet Gum Total	1 17 25 2 1	16.4 147.4 226.0 19.7 6.5 416.0	0.45 2.8 4.3 0.4 0.15
276	63	Black Cherry Black Walnut Pin Oak Total	5 11 1	22.9 45.9 13.1 81.9	0.4 1.2 0.4 2.0
276	64	Black Cherry Red Maple Sweet Gum Misc. Frag. Total	4 11 10 - 25	26.2 91.7 98.3 16.4 232.6	0.35 1.55 2.3 0.6 4.8
276	65	Persimmon Sweet Gum Total	5 2 7	42.6 6.5 49.1	1.0 0.2 1.2
276	66	Black Cherry Persimmon Total	44 6 50	190.0 49.1 239.1	2.75 1.7 4.45

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
276	67	American Elm Black Oak Persimmon Pin Oak Red Maple Sweet Gum Misc. Frag.	3 2 4 2 9 1 -	19.7 29.5 16.4 13.1 111.4 9.8 104.8	0.55 0.6 0.4 0.3 2.1 0.2 3.5 7.65
276	68	American Elm Black Cherry Black Oak Red Maple Total	1 72 1 16 90	3.3 311.2 6.5 140.9 461.9	0.2 3.4 0.2 2.5 6.3
276	69	Black Cherry	5	45.9	0.8
276	70	American Elm Black Cherry Sweet Cherry Total	6 10 18 34	9.8 36.0 91.7 137.5	0.4 0.6 2.5 3.5
277	21	American Elm Black Cherry Black Locust Total	114 2 66 182	1045.0 9.8 131.0 1185.8	16.5 0.1 2.7 19.3
277	22	American Elm Black Cherry Black Locust Total	70 8 47 125	406.2 39.3 81.9 527.4	8.2 0.5 2.1
277	23	American Elm Black Locust Total	111 28 139	1077.8 55.7 1133.5	15.0 1.1 16.1
277	24	American Elm Black Walnut Total	135 22 157	792.8 85.2 878.0	17.5 2.55 20.05
277	25	American Elm Black Locust Black Walnut Total	49 45 20 114	435.7 104.8 88.4 628.9	10.45 2.25 3.35 16.05

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
277	26	American Elm Black Cherry Black Locust Total	69 . 29 18	363.6 150.7 32.8 547.1	6.2 1.9 0.7 8.8
277	27	American Elm Black Locust Total	115 69 184	805.9 121.2 927.1	14.9 3.1 18.0
277	28	American Elm Black Locust Total	59 81 140	583.1 114.7 697.8	9.4 3.2 12.6
277	29	American Elm Black Locust Total	206 72 278	1565.9 124.5 1690.4	27.8 3.4 31.2
277	30	American Elm	93	855.0	13.85
277	51	Black Cherry Sassafras Total	3 2 5	6.5 26.2 32.7	0.3 0.5 0.8
277	52	Dogwood Persimmon Pin Oak Misc. Frag. Total	21 44 2 - 67	137.6 278.5 19.7 157.2 593.0	3.2 7.05 0.5 5.1 15.85
277	53	Sassafras Sweet Gum Total	19 4 23	222.8 9.8 232.6	2.4 0.65 3.05
277	54	Sweet Gum Tree of Heaven Total	3 6 9	6.5 39.3 45.8	0.45 1.4 1.85
277	55	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	2 129 6 - 137	3.3 1130.2 32.8 52.4 1218.7	0.25 20.3 1.0 1.9 23.45

Forest Ecology Litter Box Data - 1974

			Numban	loof Cunfoco	Diate
Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
277	57	Sweet Gum	6	19.7	0.7
	37	JWEEC Guill		13.7	0.7
277	58	Black Cherry	. 36	163.8	5.25
		Persimmon	13	108.1	2.4
		Sweet Gum Misc. Frag.	26	98.3 91.7	3.0 2.8
		Total	75	461.9	13.45
277	59	American Elm	13	114.7	2.45
		Black Cherry Persimmon	93 57	304.7 304.7	4.5 6.7
		Misc. Frag.	-	19.7	0.6
		Total	163	743.8	14.25
277	60	American Elm	9	65.5	1.5
211	00	Sassafras	5	91.7	1.5
		Sweet Gum	9	49.1	1.1
		Tulip Poplar	26	439.0	7.65
		Total	49	645.3	11.75
281	1	Beech	1	6.5	0.01
		Black Oak		65.5	1.2
		Chestnut Oak	3	65.5	1.45
		Red Maple Spanish Oak	3 3 5 1	36.0 16.4	0.25 0.3
		Tupelo	26	321.0	4.05
		White Oak	14	190.0	3.9
		Total	53	700.9	11.16
281	2	Spanish Oak	5	75.3	1.5
		Tupelo	62	727.3	8.2
		White Oak	10	91.7	1.8
		Misc. Frag. Total	<del></del>	29.5 923.8	0.65
		10001	, ,	520.0	12.13
281	3	Black Oak	2	42.6	0.7
		Dogwood	3	29.5	0.25
		Spanish Oak Sweet Gum	2 3 3 1	22.9 6.4	0.6 0.1
		Tupelo	49	435.7	4.8
	1	White Oak	18	239.1	3.65
		Total	76	776.3	10.1

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
The same of the sa					
281	4	Beech	12	111.4	1.3
201	· ·	Black Oak	7	173.6	2.8
		Red Maple	· 2	26.2	0.5
		Tupelo	22	232.6	3.5
			23	275 2	4.85
		White Oak	66	275.2	
		Total	00	819.0	12.95
281	5	Beech	9	78.6	0.7
201	3		16	504.5	8.7
		Black Oak			
		Hickory	]	19.7	0.4
		Red Maple	!	16.4	0.15
		Sweet Gum	1	3.3	0.1
		Tupelo	23	235.9	3.4
		White Oak	4	26.2	0.5
		Total	55	884.6	13.95
281	c	Diad. Oak	E	100 1	2.3
201	6	Black Oak	5	108.1	
		Sweet Gum	15	114.7	1.45
		Tupelo	36	334.1	3.85
		White Oak	17	232.6	4.55
		Total	73	789.5	12.15
281	7	Black Oak	8	111.4	2.1
201	•	Dogwood	8 4 1	26.2	0.3
		Post Oak	i	19.7	0.35
		Red Maple	3	19.7	0.33
		Spanish Oak	3	45.9	1.0
		Sweet Gum	3 3 1	13.1	0.2
		White Oak	12		
			32	180.1	2.75
		Total	32	416.1	0.9
281	8	Black Oak	5	78.6	1.3
	_	Chestnut Oak	2	19.7	0.25
		Spanish Oak	2	32.8	0.6
		Tupelo	2 2 11 2	111.4	1.45
		White Oak	2	26.2	0.5
		Misc. Frag.		16.4	0.5
		Total	22	285.1	4.6
				20011	1.0
281	9	Beech	3 4	19.7	0.1
		Chestnut Oak		62.2	0.9
		Tupelo	34	311.2	4.7
		White Oak	6	59.0	1.45
	1 1	Misc. Frag.	-	45.9	1.0
		Total	47	498.0	8.15

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
281	10	Black Oak Chestnut Oak Pin Oak Tupelo White Oak Total	2 15 1 41 2 61	59.0 344.0 16.4 455.4 13.1 887.9	0.9 5.6 0.2 6.5 0.45
281	41	Black Cherry Persimmon Sweet Cherry Sweet Gum Tulip Poplar Total	21 3 10 7 2 43	88.4 16.4 114.7 45.9 6.5 271.9	1.3 0.55 1.6 0.85 0.01 4.31
281	42	Black Cherry Dogwood Sweet Gum Total	3 2 62 67	13.1 19.7 419.3 452.1	0.2 0.3 10.5
	43	Black Cherry Persimmon Sweet Gum Misc. Frag. Total	17 15 15 - 47	65.5 108.1 98.3 29.5 301.4	0.8 1.8 2.0 0.8 5.4
281	44	Black Cherry Black Oak Persimmon Sweet Gum Total	28 1 77 9	114.7 9.8 1297.3 72.1 1493.9	1.45 0.2 9.7 1.7
281	45	Black Cherry Sweet Gum Total	100 16 116	553.6 127.8 681.4	7.45 2.7 10.15
281	46	Persimmon Sweet Gum Total	20 41 61	137.6 324.3 461.9	3.2 6.55 9.75
281	47	Black Cherry Sweet Gum Total	23 45 68	226.0 298.1 524.1	3.1 6.1 9.2

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
281	48	Black Cherry Black Oak Persimmon Sweet Gum Tulip Poplar	3 1 6 17	13.1 9.8 49.1 134.3 255.5	0.2 0.1 1.0 2.6 3.55
		Total	41	461.8	7.4
281	49	Black Cherry Persimmon Sweet Gum Total	13 2 20 35	55.7 13.1 124.5 193.3	0.7 0.35 2.8 3.85
281	50	Black Cherry Sweet Gum Tulip Poplar Total	77 23 2 102	376.7 183.5 85.2 645.4	5.0 3.6 1.4 10.0
282	31	Beech Spanish Oak Sweet Gum White Oak Total	14 2 2 1 19	81.9 13.1 39.3 6.5 140.8	1.1 0.4 0.8 0.2 2.5
282	32	Beech Dogwood Tulip Poplar Misc. Frag. Total	3 1 1 - - 5	36.0 9.8 19.7 19.7 85.2	0.5 0.15 0.5 0.4 1.55
282	33	Beech Spanish Oak Sweet Gum Tulip Poplar Total	2 3 1 7	22.9 19.7 3.3 137.6 183.5	0.2 0.45 0.01 1.8 2.46
282	34	Beech Spanish Oak Tulip Poplar Misc. Frag. Total	6 3 3 -	39.3 26.2 55.7 32.8 154.0	0.4 0.75 0.65 0.7
282	35	Beech Hornbeam Tulip Poplar Misc. Frag. Total	26 6 3 - 35	212.9 6.5 26.2 26.2 271.8	2.7 0.1 0.5 0.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
282	36	Beech Spanish Oak Tulip Poplar Tupelo Total	15 14 2 1	160.5 275.2 52.4 6.5 494.6	1.65 4.4 0.9 0.15 7.1
282	37	Beech Spanish Oak Misc. Frag. Total	23 8 - 31	242.4 101.6 16.4 360.4	2.0 2.2 0.4 4.6
282	38	Beech Black Oak White Oak Total	10 1 1 12	101.6 22.9 9.8 134.3	1.4 0.4 0.15 1.95
282	39	Beech Dogwood Spanish Oak Tulip Poplar Tupelo Sweet Gum Total	6 2 4 1 2 1	65.5 16.4 65.5 9.8 19.7 3.3	0.7 0.2 1.6 0.2 0.25 0.1 3.05
282	40	Beech Sweet Gum White Oak Misc. Frag. Total	1 3 4 - 8	26.2 19.7 36.0 26.2	0.2 0.5 0.9 0.5
282	72	Black Willow	7	13.1	0.4
282	73	Black Willow	16	39.3	0.75
282	74	Red Maple	11	85.2	1.2
282	76	Black Willow	23	45.9	0.7
282	77	Black Cherry Red Maple Total	2 1 3	6.5 6.5 13.0	0.1 0.15 0.25
282	79	Black Willow Sweet Gum Sycamore Total	51 1 1 53	203.1 6.5 16.4 226.0	3.0 0.15 0.3 3.45

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
282	80	Persimmon Pin Oak Total	4 1 · 5	29.5 13.1 42.6	0.35 0.3 0.65
283	11	Dogwood Red Maple Sweet Gum Tulip Poplar	2 1 11 3 2	36.0 6.5 59.0 88.4	0.4 0.1 0.85 1.4
		White Oak Total	2 <b>1</b> 9	26.2 216.1	3.15
283	12	Beech Black Oak Dogwood Red Maple Tupelo White Oak	10 3 2 3 28 7 53	114.7 62.2 19.7 26.2 340.7 140.9	0.65 1.0 0.15 0.4 3.2 2.5 7.9
283	13	Beech Dogwood Hickory Spanish Oak Tupelo Tulip Poplar Total	3 8 5 1 1 1	22.9 108.1 45.9 3.3 6.5 42.6 229.3	0.2 0.8 0.5 0.1 0.2 0.6
283	14	Beech Black Oak Tulip Poplar Tupelo White Oak Total	8 3 2 5 8	78.6 91.7 19.7 29.5 85.2 304.7	1.5 1.6 0.3 0.45 1.4 5.25
283	15	Dogwood Red Maple Sweet Gum Tulip Poplar Misc. Frag. Total	1 3 19 1 -	9.8 49.1 190.0 3.3 45.9 298.1	0.2 0.5 3.5 0.1 0.6 4.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup>	Dry Weight (g)
283	16	Beech Black Oak Dogwood Hickory Hornbeam Sweet Gum White Oak	5 3 · 2 2 27 1 3 43	42.6 193.3 22.9 36.0 98.3 19.7 26.2	0.5 2.5 0.3 0.6 0.6 0.5 0.4
283	17	Beech Black Oak Dogwood Hornbeam Spanish Oak Sweet Gum Tupelo White Oak	1 5 6 10 2 5 3 3	16.4 104.8 45.9 19.7 68.8 45.9 19.7 29.5	0.3 2.25 0.6 0.15 1.3 0.8 0.25 0.5
283	18	Black Oak Dogwood Spanish Oak Sweet Gum White Oak Total	1 14 8 2 1 26	29.5 183.5 88.4 13.1 6.5 321.0	0.7 1.75 1.7 0.3 0.1 4.55
283	19	Dogwood Sweet Gum White Oak Total	27 2 6 35	321.0 22.9 88.4 432.3	3.4 0.4 1.4 5.2
283	20	Black Oak Dogwood Spanish Oak Sweet Gum Tupelo Total	1 1 4 1 56 63	16.4 6.5 36.0 6.5 452.1	0.6 0.1 0.7 0.2 7.0 8.6
283	61	Persimmon Red Maple Sweet Gum Tulip Poplar Total	219 2 2 2 3 226	2538.9 29.5 19.7 75.3 2663.4	35.8 0.6 0.4 0.9 37.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
283	62	Black Oak Pin Oak Total	9 28 37	72.1 324.3 396.4	0.9 4.9 5.8
283	63	Black Cherry Black Walnut Total	9 20 29	75.3 62.2 137.5	0.7 0.75 1.45
283	64	Persimmon Red Maple Sweet Gum Total	2 1 29 32	29.5 16.4 488.1 534.0	0.3 0.3 6.55 7.15
283	65	Sweet Gum	2	29.5	0.4
283	66	Black Cherry Persimmon Total	26 48 74	190.0 914.0 1104.0	2.1 13.2 15.3
283	67	American Elm Persimmon Pin Oak Red Maple Sweet Gum Total	3 18 1 4 1 27	52.4 304.7 9.8 45.9 13.1 425.9	0.9 5.3 0.1 0.7 0.2 7.2
283	68	Black Cherry Red Maple Sweet Gum Total	14 18 1 33	75.3 186.7 19.7 281.7	0.7 3.1 0.45 4.25
_ 283	69	Black Cherry	2	13.1	0.3
283	70	American Elm Black Cherry Sweet Gum	5 17 18	29.5 111.4 157.2	0.4 1.0 2.15
284	21	Total American Elm Black Cherry Black Locust Total	40 56 4 103 163	298.1 697.8 13.1 173.6 884.5	3.55 9.15 0.15 3.6 12.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
284	22	American Elm Black Cherry Black Locust Total	71 19 47	642.1 91.7 91.7 825.5	8.7 0.9 1.8
284	23	American Elm Black Locust Total	60 66 126	776.4 111.4 887.8	8.55 2.0 10.55
284	24	American Elm Black Walnut	114 3	1048.3 9.8	17.55 0.3
284	25	Total American Elm Black Locust Black Walnut Total	117 12 56 3 71	1058.1 170.3 144.1 13.1 327.5	17.85 3.65 2.2 0.4 6.25
284	26	American Elm Black Cherry Black Locust Tulip Poplar Total	29 23 11 1	222.8 91.7 19.7 19.7 353.9	2.9 1.1 0.4 0.2 4.6
284	27	American Elm Black Locust Total	145 83 228	1215.4 98.3 1313.7	17.3 3.0 20.3
284	28	American Elm Black Locust Total	38 58 96	386.6 81.9 468.5	5.0 1.8 6.8
284	29	American Elm Black Locust Total	199 226 425	1949.2 327.6 2276.8	29.05 6.9 35.95
284	30	American Elm	84	858.3	12.85
284	52	Dogwood Persimmon Sassafras Sweet Gum Total	81 52 2 1	838.7 488.1 39.3 6.5	13.65 10.0 0.5 0.1 24.25

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
284	53	Sassafras Sweet Gum Total	10 3 13	157.2 13.1 170.3	1.45 0.1 1.55
284	54	Black Cherry Sweet Gum Tree of Heaven Total	1 7 3	6.5 36.0 29.5 72.0	0.15 0.9 1.0 2.05
284	55	Persimmon Sweet Gum Total	110 5 115	1117.1 22.9 1140.0	17.5 0.4 17.9
284	56	Black Cherry Persimmon Total	1 2 3	3.3 11.7 15.0	0.01 0.4 0.41
284	57	Sweet Gum	21	98.3	1.8
284	58	Black Cherry Box Elder Persimmon Sweet Gum Total	3 29 8 41 81	13.1 186.7 91.7 239.1 530.6	0.25 3.3 1.6 7.2 12.35
284	59	American Elm Black Cherry Persimmon Sweet Gum Total	16 48 75 2	271.9 170.3 504.5 6.5 953.2	4.3 2.25 8.1 0.25
284	60	Sassafras Sweet Gum Tulip Poplar Total	5 2 34 41	75.3 9.8 789.5 874.6	0.9 0.1 9.6
288	1	Beech Black Oak Chestnut Tupelo White Oak Total	3 52 2 161 36 254	42.6 1500.4 42.6 2807.5 727.3	0.7 32.9 0.8 32.8 9.85 77.05

Day of	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
288	2	Beech Black Oak Spanish Oak Tupelo White Oak Total	1 16 2 185 14 218	13.1 461.9 42.6 3223.6 281.7 4022.9	0.2 8.45 0.35 21.25 3.4 33.65
288	3	Black Oak Dogwood Northern Red Oak Red Maple Spanish Oak Sweet Gum Tupelo White Oak Total	15 9 1 1 9 6 133 33	432.4 101.6 85.2 9.8 170.3 98.3 2319.4 665.0	10.0 1.0 1.0 0.05 2.35 0.2 19.85 11.7 46.15
288	4	Beech Black Oak Northern Red Oak Red Maple Spanish Oak Tupelo White Oak	12 29 4 49 7 208 59	121.2 835.4 117.9 874.7 147.4 3118.7 1189.2	1.3 13.4 2.0 6.5 1.75 36.4 3.45
288	5	Beech Black Oak Chestnut Oak Hickory Red Maple Tupelo White Oak Total	21 35 1 15 1 95 13	281.7 1009.0 19.7 186.7 6.5 1130.2 262.1 2895.9	2.7 14.7 0.3 3.6 0.1 15.9 8.4 45.7
288	6	Black Oak Chestnut Chestnut Oak Spanish Oak Sweet Gum Tupelo White Oak Total	19 5 10 2 6 102 53 197	547.1 117.9 219.5 19.7 36.0 1418.5 704.3 3063.0	10.6 1.9 2.85 0.45 0.6 16.3 13.0 45.7

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
288	7	Beech Black Oak Dogwood Red Maple Spanish Oak Sweet Gum Tupelo White Oak	3 43 16 10 4 6 16 44	16.4 1392.3 186.7 117.9 104.8 98.3 278.5 609.3	0.1 23.7 1.7 1.0 1.35 1.8 2.6 10.4 42.65
288	8	Black Oak Chestnut Chestnut Oak Dogwood Tupelo Virginia Pine White Oak	28 1 4 1 21 16 38	805.9 22.9 88.4 9.8 222.8 6.5 766.6	14.5 0.25 2.2 0.15 3.1 0.4 10.1
288	9	Beech Black Oak Chestnut Oak Red Maple Spanish Oak Tupelo White Oak Total	21 3 7 6 2 149 105 293	288.3 68.8 167.1 72.1 42.6 2597.9 2119.6	2.3 1.2 2.25 0.85 0.75 22.1 24.8 54.25
288	10	Beech Black Oak Chestnut Oak Spanish Oak Sweet Gum Tupelo White Oak Total	12 41 57 7 9 68 64	124.5 1182.6 1248.2 147.4 55.7 835.4 825.5	1.25 20.75 16.8 2.3 0.85 11.25 14.6
288	41	Black Cherry Sweet Cherry Sweet Gum Tulip Poplar Total	59 18 14 3	389.8 235.9 127.8 65.5 819.0	4.1 2.2 2.4 0.7 9.4

**************************************			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
288	42	Black Cherry	4	13.1	0.2
		Dogwood	. 1	9.8	0.1
		Persimmon	. 8	65.5	1.1
		Sweet Gum Tulip Poplar	241 2	2250.6 39.3	51.9 0.3
		Total	256	2378.3	53.6
		10001	200	2070.0	00.0
288	43	Black Cherry	22	127,8	1.3
		Persimmon	23	288.3	5.5
	- Vandrooken and an and a second	Sweet Gum	34	298.1	5.9
		Total	79	714.2	12.7
288	44	Black Cherry	44	167.1	1.7
		Black Oak	6	75.3	0.8
		Persimmon	87	871.4	15.85
		Sweet Gum	29	190.0	4.3
		Total	166	1303.8	22.65
288	45	Black Cherry	95	681.4	9.55
		Black Oak		78.6	1.6
		Dogwood	6 3 3	29.5	0.3
		Pin Oak	3	42.6	0.7
		Sweet Gum	55	330.9	6.8
		Tulip Poplar	21	448.8	4.9
		Total	183	1611.8	23.85
288	46	Black Cherry	3 2	22.9	0.3
		Persimmon		19.7	0.55
		Sweet Gum	114	1431.6	22.45
		Total	119	1474.2	23.3
288	47	Black Cherry	54	537.3	6.1
		Sweet Gum	110	1097.5	16.9
		Tulip Poplar	5	85.2	0.6
		Total	169	1720.0	23.6
288	48	Persimmon	22	278.5	3.3
		Sweet Gum	34	327.6	5.1
		Tulip Poplar	151	4694.5	48.25
		Total	207	5300.6	56.65
288	49	Black Cherry	33	212.9	1.8
		Persimmon	5	55.7	0.65
		Sweet Gum	48	478.3	6.4
	1 1 1	Tulip Poplar	]	9.8	0.2
		Total	87	756.7	9.05

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
288	50	Black Cherry	271	1212.1	12.6
200	00	Sweet Gum	58	612.6	9.4
		Tulip Poplar	5	196.7	1.7
		Total	334	2021.4	23.7
289	31	Beech	471	6172.0	49.65
		Black Oak	7	203.1	2.9
		Spanish Oak	8	167.1	1.85
		Sweet Gum	6	114.7	1.7
		Tulip Poplar	6	216.2	2.4
		White Oak	3	59.0	0.3
		Total	501	6932.1	58.8
289	32	Beech	330	4324.3	36.15
		Dogwood	14	255.5	1.15
		Spanish Oak	4	85.2	1.45
		Sweet Gum	21	439.0	4.9
		Tulip Poplar	2	75.3	0.35
	The first or forward and the State of the St	White Oak	]	19.7	0.35
		Total	372	5199.0	44.5
289	33	Beech	73	956.6	6.35
		Black Oak	42	1212.1	13.55
		Dogwood	3 1 8 5	52.4	0.3
		Red Maple	1	16.4	0.15
		Spanish Oak	8	167.1	2.2
00000		Tulip Poplar		180.2	1.75
		Total	132	2584.8	24.3
289	34	Beech	80	1048.3	7.4
		Dogwood	2	16.4	0.1
		Spanish Oak	37	773.1	11.3
		Tulip Poplar	25	897.6	5.5
		White Oak	6	121.2	1.25
		Total	150	2856.6	25.55
289	35	Beech	430	5634.7	55.8
		Chestnut Oak	1	22.9	0.15
		Hornbeam	5	16.4	0.05
		Spanish Oak	5	104.8	1.8
	. 6 . 6.	Sweet Gum	5 5 2 14	39.3	0.6
		Tulip Poplar		501.2	2.6
		Total	457	6319.3	61.00

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
289	36	Beech Black Oak Chestnut Oak Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak	150 1 6 15 24 3 36 1	1965.6 29.5 131.0 461.9 501.2 59.0 1294.0 19.7	13.7 0.5 1.0 4.0 5.15 0.55 8.2 0.2
289	37	Beech Dogwood Spanish Oak Sweet Gum Tulip Poplar Total	476 1 91 14 8 590	6237.5 19.7 1903.4 268.6 288.3	46.6 0.2 24.3 3.8 2.7 77.6
289	38	Beech Pin Oak Spanish Oak Virginia Pine White Oak Total	240 11 4 16 16 287	3145.0 229.3 85.2 6.5 324.3	33.35 6.15 1.7 0.3 2.9 44.4
289	39	Beech Black Oak Dogwood Hickory Spanish Oak Sweet Gum Tupelo Tulip Poplar	79 1 13 11 24 1 5 46	1035.2 29.5 222.8 147.4 501.2 19.7 88.4 1651.1	8.5 1.0 1.0 1.2 6.3 0.2 1.0 10.85 30.05
289	40	Beech Black Jack Oak Black Oak Black Oak Dogwood Northern Red Oak Sweet Gum Tulip Poplar White Oak Total	202 1 3 3 2 21 8 57	2647.0 88.4 85.2 52.4 186.7 402.9 288.3 1149.9	21.55 0.6 2.05 0.4 1.85 5.1 1.5 19.85

Forest Ecology Litter Box Data - 1974

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
289	71	Red Maple	1	16.4	0.2
289	72	Black Oak Black Willow Total	1 10 11	6.5 36.0 42.5	0.1 0.4 0.5
289	73	Black Willow Persimmon Total	27 2 29	78.6 26.2 104.8	0.9 0.3 1.2
289	74	Red Maple	57	1015.6	10.55
289	76	Black Oak Black Willow Sweet Gum Sycamore Total	1 18 1 1 21	13.1 45.9 19.7 13.1 91.8	0.2 0.5 0.25 0.2 1.15
289	77	Persimmon Red Maple Spanish Oak Total	3 11 11 25	62.2 196.6 229.3 488.1	0.6 1.25 2.5 4.35
289	79	Black Willow Red Maple Sycamore Total	51 2 10 63	222.8 45.9 416.0 684.7	2.5 0.7 4.8 8.0
289	80	Black Oak Sweet Gum Total	11 1 12	317.8 29.5 347.3	1.3 0.3 1.6
290	11	Beech Dogwood Hickory Hornbeam Red Ash Red Maple Sweet Gum Tulip Poplar White Oak	3 48 9 2 3 15 28 70 8	39.3 825.5 114.7 16.4 26.2 268.6 537.3 2512.7 160.5 4501.2	0.1 4.9 1.05 0.15 0.8 1.2 3.2 15.4 1.0

			Number	Leaf Surface	Dev
Day of	Box		of	Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
1371	Trumb CT	opeores		(0 /	\3/
290	12	Beech	61	799.3	5.2
		Black Oak	69	1988.5	47.1
		Dogwood	32	550.4	2.8
		Hickory	22	275.2	3.25
		Red Maple	9	160.5	2.05
		Sweet Gum	9	173.6	2.0
		Tulip Poplar	22	798.5	3.65
		Tupelo	80	1395.6	12.0
		White Oak Total	14 318	281.7 6423.3	80.25
		Ισται	310	0423.3	80.23
290	13	Beech	103	1349.7	9.6
		Black Oak	8	229.3	4.2
		Dogwood	10	173.6	0.7
		Hickory	133	1654.4	11.3
		Spanish Oak	2	42.6	0.55
		Sweet Gum	49	936.9	4.45
		Sycamore	4	173.6	1.8
		Tulip Poplar	58	2083.5	14.5
		Tupelo	20 387	347.3 6990.9	3.3
		Total	307	0990.9	50.4
290	14	Beech	209	2738.7	31.2
		Black Oak	8	229.3	5.2
		Dogwood	8 1	137.6	1.0
		Hickory	1	13.1	0.25
		Red Maple	5	88.4	0.7
		Spanish Oak	5	104.8	0.7
		Tulip Poplar	10	360.4	2.3
		Tupelo	20	347.3	2.3
	· · · · · · · · · · · · · · · · · · ·	White Oak Total	86 352	1736.3 5755.9	12.4 56.05
		lotal	332	5/55.9	50.05
290	15	Beech	25	327.6	2.1
		Black Oak	1	29.5	1.4
		Dogwood	50	861.6	7.2
		Hickory	3	36.0	0.3
		Hornbeam	26	147.4	0.7
		Post Oak	12	301.4	4.2
		Red Maple	27	481.6	5.5
		Spanish Oak Sweet Gum	1 259	19.7 4956.6	0.2 56.35
		Tulip Poplar	209	39.3	0.05
		Tupelo	1	16.4	0.05
		White Oak	26	524.2	4.9
		Virginia Pine	12	3.3	0.1
		Total	444	7744.6	83.15

- Carranto Company Company			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
290	16	Beech	94	1231.8	12.4
		Black Oak	.18	517.6	12.85
		Box Elder	20	121.2	1.35
		Dogwood	22	380.0	2.4
		Hickory	35	435.7	8.55
		Hornbeam	319	1798.5	6.85
		Spanish Oak	29 26	606.1 497.9	7.0
		Sweet Gum Virginia Pine	3	0.3	5.3 0.01
		White Oak	59	1189.2	13.0
		Total	625	6778.3	69.71
		10001	023	0770.5	03.71
290	17	Beech	8	104.8	1.0
		Black Oak	33	950.0	17.9
		Dogwood	51	878.0	6.35
		Hickory	5	62.2	0.9
		Hornbeam	51	288.3	0.8
		Red Maple	2	36.0	0.3
		Spanish Oak	109	2283.4	39.75
		Sweet Gum	71	1359.5	15.9
		Tupelo	7	121.2	1.2
		Virginia Pine	-	3.3	0.8
		White Oak	87	1755.9	26.3
		Total	424	7842.6	111.2
290	18	Black Oak	27	779.7	13.55
		Dogwood	142	2443.9	17.7
		Hickory	2	26.2	0.02
		Spanish Oak	101	2113.0	24.75
		Sweet Gum	23	439.0	4.9
		White Oak	12	242.4	3.65
		Total	307	6044.2	64.57
290	19	Beech	2	26.2	0.2
290	13	Black Oak	2 3 7	85.2	0.2 1.1
		Chestnut Oak	7	376.7	3.5
		Dogwood	87	1497.1	11.0
		Hickory	6	75.3	1.0
		Red Maple	5	88.4	0.45
		Spanish Oak	14	291.6	3.75
		Sweet Gum	23	439.0	6.0
		Tulip Poplar	5	180.2	1.1
		Tupelo	11	193.3	1.8
		White Oak	140	2823.9	28.45
		Total	303	6076.9	58.35

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
290	20	Beech Black Cherry Dogwood Hickory Spanish Oak Sweet Gum Tupelo Virginia Pine	11 1 27 5 68 58 541 16	144.1 6.5 465.2 62.2 1425.1 1110.6 9428.3 1.6	2.1 0.02 2.7 0.5 12.45 9.25 67.55 0.2 94.77
290	61	Black Oak Box Elder Persimmon Red Maple Sweet Gum Tulip Poplar Total	5 4 100 5 44 2 160	144.1 22.9 1795.2 88.4 841.9 72.1 2964.6	0.85 0.25 18.2 0.25 10.1 0.25 29.9
290	62	Black Cherry Box Elder Persimmon Pin Oak Red Maple Sweet Gum Sycamore Total	35 12 2 228 62 12 1	307.9 154.0 36.0 4720.7 1104.0 229.3 55.7	1.0 0.88 0.1 5.55 5.55 2.75 0.5
290	63	American Elm Black Cherry Black Walnut Box Elder Persimmon Red Maple Total	2 12 30 6 3 2	22.9 88.5 95.0 52.4 52.4 36.0	0.25 0.9 1.5 0.5 0.4 0.85
290	64	Black Cherry Box Elder Persimmon Red Maple Sweet Gum Willow Oak Total	6 109 6 37 212 114 484	52.4 665.0 108.1 658.5 4055.7 1254.7	0.3 5.1 1.35 4.05 7.9 16.2 34.9

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
290	65	American Elm Sweet Gum Total	1 35 36	19.7 668.3 688.0	0.2 7.65 7.85
290	66	Black Cherry Persimmon Sweet Gum Total	192 60 1 253	1887.0 1077.8 19.7 2984.5	12.5 9.25 0.85 22.6
290	67	American Elm Black Oak Persimmon Pin Oak Red Maple Sweet Gum	38 2 3 3 25 5	760.0 59.0 52.4 62.2 445.5 95.0	5.75 0.6 0.3 0.7 3.65 0.45
290	68	American Elm Black Cherry Red Maple Sweet Gum Total	2 143 251 6 402	39.3 1405.4 4471.7 114.7 6031.1	0.01 6.2 31.85 1.4 39.46
290	70	American Elm Black Cherry Sweet Gum Total	39 65 192 296	779.7 638.8 3672.4 5090.9	2.1 5.9 4.5 12.5
291	21	American Elm Black Cherry Black Locust Total	191 51 687 929	3816.5 501.2 1801.8 6119.5	34.6 2.7 17.0 54.3
291	22	American Elm Black Cherry Black Locust Total	173 57 377 607	3456.2 560.2 989.3 5005.7	26.4 10.3 13.5 50.2
291	23	American Elm Black Locust Total	199 481 680	3977.1 1261.3 5238.4	36.0 14.1 50.1
291	24	American Elm Black Locust Black Walnut Total	287 76 29 392	5736.3 203.1 209.7 6149.1	51.15 3.5 4.75 59.4

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
291	25	American Elm Black Locust Black Walnut Tulip Poplar Total	42 292 15 2 351	838.7 766.6 108.1 72.1 1785.5	10.5 12.6 1.65 0.45 25.2
291	26	American Elm Black Cherry Black Locust Spanish Oak Sweet Gum Tulip Poplar Total	111 313 72 3 9 14	2217.9 3076.2 190.0 62.2 173.6 501.2	18.45 23.4 2.3 1.0 2.0 5.3 52.45
291	27	American Elm Black Locust Total	365 270 635	7295.6 707.6 8003.2	60.2 9.55 69.75
291	28	American Elm Black Locust Black Walnut Total	212 730 18 960	4235.9 1913.2 131.0 6280.1	31.4 19.45 2.3 53.15
291	29	American Elm Black Locust Black Oak Total	433 841 1 1275	8651.9 2204.7 29.5 10886.1	72.35 29.6 0.3 102.25
291	30	American Elm Black Locust Chestnut Oak Total	336 276 9 621	6715.8 724.0 196.6 7636.4	66.3 8.2 0.8 75.3
291	51	American Elm Black Cherry Sassafras Sweet Gum Total	2 7 13 6 28	39.3 68.8 288.3 114.7 511.1	0.7 0.5 2.35 1.25 4.8
291	52	Black Oak Dogwood Sassafras Sweet Gum Total	2 238 5 1 246	59.0 4095.0 111.4 19.7 4285.1	0.55 51.75 1.0 0.35 53.65

Day of 1974         Box Number         Species         Of Leaves         Area (cm²)         Weight (g)           291         53         Sassafras Sweet Gum 29 553.6 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0				Number	Leaf Surface	Dry
291     53     Sassafras Sweet Gum     102 2273.5 21.5 21.5 29 553.6 5.0 20 20 20 20 20 20 20 20 20 20 20 20 20	Day of	Box			Area	
Sweet Gum         29         553.6         5.0           Total         131         2827.1         26.5           291         54         Black Cherry         1         9.8         0.2           Sweet Gum         17         324.3         4.2		Number	Species	Leaves	(cm <sup>2</sup> )	(g)
Sweet Gum         29         553.6         5.0           Total         131         2827.1         26.5           291         54         Black Cherry         1         9.8         0.2           Sweet Gum         17         324.3         4.2	003	F-0	C C -	100	0070 5	01 5
Total 131 2827.1 26.5  291 54 Black Cherry 1 9.8 0.2 Sweet Gum 17 324.3 4.2	291	53				
291 54 Black Cherry 1 9.8 0.2 Sweet Gum 17 324.3 4.2	to the second se					26.5
Sweet Gum 17 324.3 4.2			Ισται	131	2027.1	20.5
Sweet Gum 17 324.3 4.2	291	54	Black Cherry	1	9.8	0.2
Total 18 334.1 4.4				17	324.3	4.2
			Total	18	334.1	4.4
291 55 Black Cherry 40 393.1 3.3	201	55	Plack Channy	40	303 1	2 2
291 55 Black Cherry 40 393.1 3.3 Persimmon 613 11004.1 96.7	231	55				
Sweet Gum 49 936.9 8.6						
Total 702 12334.1 108.6	***************************************					
702 12307.1 100.0			10001	, 02	1200 111	.00.0
291 56 Black Cherry 16 157.2 1.3	291	56	Black Cherry	16	157.2	1.3
Persimmon 4 72.1 0.75				4	72.1	0.75
Red Maple 5 88.4 0.8			Red Maple			
Total 25 317.7 2.85			Total	25	317.7	2.85
291 57 Persimmon 9 160.5 1.45	291	57	Persimmon	q	160 5	1 45
Sweet Gum 85 1624.9 12.6	231	37				
Total 94 1785.4 14.05						
291 58 Black Cherry 3 29.5 0.6	291	58				
Box Elder 316 1926.3 32.65						
Persimmon 232 4163.8 27.0						
Sweet Gum 131 2506.1 34.15						
Total 682 8625.7 94.4			Total	682	8625.7	94.4
291 59 American Elm 18 360.4 6.2	291	59	American Flm	18	360.4	6.2
Black Cherry 191 1877.1 14.9		0.0				
Persimmon 491 8815.7 42.95						
Spanish Oak 1 19.7 0.1						
Sweet Gum 102 1952.5 24.5				102		
Total 803 13025.4 88.65			Total	803		88.65
291 60 American Elm 10 199.8 1.8	291	60	American Flm	10	100 2	1 Q
Red Maple 20 357.1 1.5	601	00				
Sassafras 11 245.7 2.5						
Sweet Gum 78 1493.9 11.55						11.55
Tulip Poplar 224 8042.6 78.65						
Total 343 10339.1 96.0						

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
295	1	Beech Black Oak Red Maple Spanish Oak Tupelo	74 28 24 21 73	969.7 805.9 429.2 439.0 1271.1	5.7 18.5 2.5 5.15 13.5
	-4- 1	White Oak Total	59 279	1189.2 5104.1	14.2 59.55
295	2	Black Oak Spanish Oak Tupelo White Oak Total	30 51 74 74 229	864.9 1068.0 1290.7 1493.9 4717.5	16.6 14.8 11.2 15.8 58.4
295	3	Black Oak Spanish Oak Tupelo White Oak Total	35 78 96 92 301	1009.0 1631.4 1674.0 1857.5 6171.9	22.0 19.5 15.4 22.1 79.0
295	4	Beech Black Oak Red Maple Spanish Oak Tupelo White Oak Total	118 26 35 2 101 23 305	1546.3 750.2 622.4 42.6 1759.2 465.2 5185.9	11.8 20.6 6.6 1.0 19.7 5.2 64.9
295	5	Beech Black Oak Red Maple Tupelo White Oak Total	239 105 13 61 41 459	3131.9 3027.0 232.6 1064.7 828.8 8285.0	26.5 71.0 2.5 11.1 11.1
295	6	Beech Black Oak Chestnut Oak Spanish Oak Sweet Gum Tupelo White Oak Total	59 61 19 2 22 123 100	773.1 1759.2 416.0 42.6 419.3 2142.5 2018.0	6.1 39.7 8.5 0.3 3.75 22.7 29.1

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
295	7	Beech Black Oak Dogwood Hickory Red Maple Spanish Oak Sweet Gum Tupelo White Oak	7 115 12 15 38 51 17 12 97	91.7 3315.3 206.4 186.7 678.1 1068.0 324.3 209.7 1959.0	1.0 68.6 1.5 3.7 4.6 12.0 3.4 1.8 27.4
295	8	Total Black Oak Chestnut Oak Red Maple Spanish Oak Tupelo White Oak Total	53 12 15 6 75 46	1526.6 262.0 268.6 124.4 1307.1 927.1	28.2 5.1 1.9 1.7 13.5 9.6 60.0
295	9	Beech Black Oak Chestnut Oak Red Maple Spanish Oak Tupelo White Oak Total	43 21 22 11 5 52 78 232	563.4 606.1 481.6 196.7 104.8 907.4 1572.5	5.7 10.2 7.9 1.4 1.7 12.0 19.1 58.0
295	10	Beech Black Oak Chestnut Oak Spanish Oak Tupelo White Oak Total	15 29 38 2 95 87 266	196.6 835.4 832.1 42.6 1654.4 1755.9 5317.0	1.2 18.5 14.1 0.5 39.5 18.2
295	41	Black Cherry Sweet Cherry Sweet Gum Tulip Poplar Total	78 30 25 6	766.6 491.4 478.3 216.2	7.1 4.0 3.2 0.9

Day of	Вох		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
295	42	Black Cherry Persimmon Sweet Gum	3 12 · 254	29.5 216.2 4858.3	0.1 1.4 53.55
1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		Tulip Poplar Total	273	144.1 5248.1	0.5 55.55
295	43	Black Cherry Persimmon Sweet Gum	29 26 41	285.0 465.2 783.0	1.6 5.65 6.3
		Total	96	1533.2	13.55
295	44	Black Cherry Black Oak Persimmon	52 5 92	511.1 144.1 1651.1	2.0 0.75 16.2
		Sweet Gum Total	32 181	612.6 2918.9	4.45 23.4
295	45	Black Cherry Black Oak Dogwood Pin Oak Sweet Gum Tulip Poplar	100 · 9 2 4 59 25 199	982.8 258.8 36.0 81.9 1130.2 897.6 3387.3	10.35 1.7 0.2 0.75 7.1 5.15 25.25
295	46	Black Cherry Persimmon Sweet Gum Total	5 1 123 129	49.1 16.4 2352.2 2417.7	0.5 0.3 23.9 24.7
295	47	Black Cherry Sweet Gum Tulip Poplar Total	60 110 7 177	589.7 2103.2 252.2 2945.1	6.7 18.3 0.75 25.75
295	48	Persimmon Sweet Gum Tulip Poplar Total	29 49 169 247	520.9 936.9 6067.1 7524.9	4.0 6.9 52.3 <b>63.</b> 2
295	49	Black Cherry Persimmon Sweet Gum Total	43 3 60 106	422.6 52.4 1146.6 1621.6	2.7 0.25 7.7 10.65

e-managed-scale			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm2)	(g)
	TOMEST	Opec ics	Ecuves	(3111-)	(37
295	50	Black Cherry	305	2997.5	15.9
		Sweet Gum	70	1339.9	11.1
		Tulip Poplar	. 8	288.3	2.0
<del></del>		Total	383	4625.7	29.0
296	31	Beech	312	6234.2	35.9
		Black Oak	20	576.6	10.7
		Hickory	20	439.0	3.6
		Spanish Oak	49	1025.4	11.7
		Sweet Gum	68	1670.8	28.75
		Tulip Poplar	3	117.9	0.55
		Total	472	10063.9	91.2
296	32	Beech	283	5654.4	38.9
		Black Oak	5 5	144.1	1.65
		Dogwood	5	65.5	0.5
		Northern Red		29.5	0.55
		Spanish Oak	20	419.3	5.7
		Sweet Gum	54	1326.8	16.35
		Tulip Poplar	13	507.8	4.0
• 11 12 12 12 12 12 12 12 12 12 12 12 12		White Oak	11	222.8	3.35
		Total	392	8370.2	71.0
296	33	Beech	131	2617.5	11.5
		Black Oak	28	805.9	13.3
		Hickory	5	111.4	1.85
		Spanish Oak	61	1277.6	16.15
		Sweet Gum	11	271.9	2.8
		Tulip Poplar	38	1480.7	17.05
		Total	274	6565.0	62.65
296	34	Beech	166	3318.6	18.2
		Black Oak	4	114.7	1.7
		Spanish Oak	35	733.8	13.6
		Tulip Poplar	73	2846.8	20.0
		Tupelo	3	52.4	0.55
		White Oak	16	324.3	4.0
		Total	297	7390.6	58.05

Day of	Dov		Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm2)	Weight (g)
13/7	Hambel	JPCC1C3	LCUVCS	( Onlie )	(97
296	35	Beech	642	12828.8	75.55
		Hickory	5	111.4	1.55
		Hornbeam	· 3 15	16.4 314.5	0.05
		Spanish Oak Tulip Poplar	19	740.4	4.05 4.35
		Virginia Pine	39	127.8	0.7
		White Oak	2	39.3	0.45
		Total	725	14178.6	86.7
296	36	Beech	265	5297.3	31.0
230	30	Black Oak	7	203.1	4.0
		Hickory	15	330.9	3.85
		Spanish Oak	89	1864.0	29.45
		Sweet Gum	21	517.6	5.85
		Tulip Poplar Total	46 443	1792.0 10004.9	14.9 89.05
		10 ta 1	4-15	1000-7.5	03.03
296	37	Beech	410	8193.3	46.15
		Black Oak	2	59.0	0.8
		Spanish Oak Sweet Gum	129 17	2699.4 419.3	32.95 5.0
		Tulip Poplar	18	701.1	5.35
		Total	576	12072.1	90.25
296	38	Beech	555	11092.5	77.5
230	30	Black Oak	8	229.3	4.5
		Hickory		88.4	1.4
		Tulip Poplar	4 3	117.9	1.1
		Virginia Pine	46	150.7	0.75
	<del> </del>	White Oak Total	15 631	301.4 11980.2	4.25 89.5
			031	11300.2	09.5
296	39	Beech	207	4137.6	24.8
		Black Oak	12	340.7	8.5
		Dogwood Hickory	3 20	39.3	0.25
		Spanish Oak	20 82	439.0 1716.6	5.2 28.9
		Sweet Gum	7	173.6	2.9
		Tulip Poplar	43	1677.3	13.1
		Tupelo	2	36.0	0.35
		White Oak Total	379	59.0 8619.1	0.55 84.55
		Ισται	3/9	0019.1	04.55

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
296	40	Beech Black Oak Hickory Sweet Gum Tulip Poplar White Oak Total	285 8 22 72 9 43	5697.0 229.3 481.6 1769.0 350.5 868.1	33.45 4.0 6.4 19.8 2.8 20.55
296	71	Red Maple	7	19.7	0.1
296	72	Black Willow	13	144.1	0.5
296	73	Beech Black Willow Pin Oak Sycamore	1 14 1 1	19.7 154.0 19.7 16.4 209.8	0.01 0.6 0.05 0.2
296	74	Total  Black Cherry Red Maple Tulip Poplar	2 46 1 49	16.4 828.8 39.3	0.15 6.65 0.05
296	77	Total  Black Cherry Red Maple Spanish Oak Sweet Gum Tulip Poplar Total	3 20 6 3 3 3	884.5 22.9 360.4 124.5 75.3 117.9	6.85 0.1 3.6 2.0 1.7 0.75 8.15
296	78	Black Oak Persimmon Sweet Gum Total	1 1 2 4	29.5 13.1 49.1 91.7	0.2 0.1 0.65 0.95
296	79	Black Oak Black Willow Red Maple Sweet Gum Sycamore Total	1 13 7 3 3	29.5 144.1 127.8 75.3 154.0	0.3 0.4 1.4 0.4 2.1 4.6

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
296	80	Black Oak	7	203.1	1.15
		Pin Oak		81.9	1.3
		Red Maple	· 4 · 2 2	36.0	0.2
		Sweet Gum	15	49.1	0.4
		Total	15	370.1	3.05
297	11	Black Oak	2 6	59.0	0.7
		Dogwood	6	78.6	0.9
		Red Maple	16	288.3	1.1
		Sweet Gum	57	1402.1	10.0
		Tulip Poplar White Oak	79 6	3079.4 121.2	24.4 0.8
		Total	166	5028.6	37.9
				0020.0	0, 15
297	12	Beech	49	979.5	4.9
		Black Oak	14	402.9	9.4
		Dogwood	15	196.6	2.2
		Hickory Sweet Gum	25 34	550.4 835.4	5.4 7.4
		Tulip Poplar	21	819.0	6.7
		Tupelo	3	52.4	0.5
		White Oak	11	222.8	3.8
		Total	172	4059.0	40.3
297	13	Beech	37	740.4	4.4
237	. 0	Black Oak	9	258.8	5.4
		Dogwood	5	65.5	0.7
		Hickory	10	219.5	1.6
		Sweet Gum	50	1228.5	9.4
		Sycamore	]	42.6	0.5
		Tulip Poplar	96	3741.2	27.5
		Tupelo Total	5 213	88.4 6384.9	1.0
		10 001	213	0304.3	30.3
297	14	Beech	83	1657.7	25.2
		Black Oak	15	432.4	8.4
		Dogwood Dod Manla	2	26.2	0.2
		Red Maple	15 2 2 4	36.0	0.3
		Spanish Oak Tulip Poplar	21	85.2 819.0	1.2 6.5
		Tupelo	4	68.8	0.5
		White Oak	69	1392.3	11.8
		Total	200	4517.6	54.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
297	15	Beech Black Cherry	33	658.5 22.9	4.4
		Dogwood	30	393.1	4.9
		Hickory	26	570.0	5.8
		Hornbeam	11	62.2	0.5
		Red Maple	22	396.4	5.9
		Spanish Oak	2	42.6	0.7
		Sassafras	1	59.0	0.6
		Sweet Gum	401	9854.2	137.1
		Tulip Poplar	6	232.6	2.3
		Tupelo	8	140.9	1.0
		Virginia Pine	23	75.3	0.6
		White Oak Total	29 595	586.4 13094.1	8.3
		ισται	393	13094.1	172.3
297	16	Beech	125	2499.6	14.5
em 67 ,	, 0	Black Oak	27	779.7	18.4
		Dogwood	14	183.5	1.5
		Hickory	26	570.0	5.9
		Hornbeam	54	304.7	1.7
		Spanish Oak	54	1130.2	15.2
		Sweet Gum	25	615.9	5.6
		Tupelo	2	36.0	0.7
		Virginia Pine	14	45.9	0.3
-	-	White Oak	16	324.3	3.7
		Total	357	6489.8	67.5
297	17	Beech	42	238.7	6.3
	``	Black Oak	36	1038.5	27.0
		Black Cherry	12	95.0	0.4
		Dogwood	21	275.2	2.0
		Hickory	13	285.0	2.0
		Hornbeam	14	78.6	0.3
		Post Oak	3	117.9	1.9
		Spanish Oak	83	1736.3	31.3
		Sweet Gum	170	4176.9	45.8
		Tupelo	6	104.8	1.1
		Virginia Pine	47	154.0	0.7
		White Oak Total	14 461	281.7	3.9
		ισται	401	9182.6	122.7

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
297	18	Black Oak Dogwood Spanish Oak Sweet Gum White Oak Total	31 38 150 42 22 283	894.3 497.9 3141.7 1031.9 445.5	12.3 5.6 39.7 11.5 5.3 74.4
297	19	Beech Black Oak Chestnut Oak Dogwood Hickory Red Maple Spanish Oak Sweet Gum Tulip Poplar Tupelo White Oak	11 7 8 45 11 5 68 53 10 2 63	219.5 203.1 173.6 589.7 242.4 91.7 1425.1 1303.8 389.8 36.0 1271.1	1.4 5.5 3.8 7.2 2.9 0.7 16.5 9.6 3.8 0.6 15.8
297	20	Beech Black Oak Dogwood Hickory Spanish Oak Sweet Gum Tupelo Total	108 1 7 8 44 50 109 327	2158.9 29.5 91.7 176.9 920.6 1228.5 1900.1	15.3 0.9 0.8 1.7 9.4 17.9 24.2 70.2
297	61	Pin Oak Red Maple Sweet Gum Tulip Poplar Total	4 44 28 23 99	81.9 792.8 688.0 897.6 2460.3	5.0 5.1 7.0 11.2 28.3
297	62	Black Cherry Pin Oak Red Maple Sweet Gum Total	3 210 66 13 292	22.9 4347.2 1189.2 321.0 5880.3	0.2 36.0 8.0 6.7 50.9
297	63	Black Cherry Pin Oak Total	11 5 16	85.2 104.8 190.0	1.0

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of	Box		of	Area (cm²)	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
297	64	Black Cherry	13	101.6	0.5
		Persimmon	4	52.4	0.5
		Red Maple	125	2253.9	19.0
		Sweet Gum	103	2532.3	37.0
		Tulip Poplar	2	78.6	1.0
		Total	247	5018.8	58.0
297	65	Sweet Gum	13	321.0	4.0
		Tulip Poplar	3	117.9	0.5
		Total	16	438.9	4.5
297	66	Black Cherry	124	976.2	10.4
		Persimmon	16	216.2	2.0
	•	Sweet Gum	2	49.1	0.6
		Total	142	1241.5	13.0
297	67	American Elm	13	242.4	2.0
231	07	Black Oak	23	661.7	6.0
		Red Maple	40	720.7	7.5
		Sweet Gum	6	147.4	2.0
the specific of the second		Total	82	1772.2	17.5
297	68	Black Cherry	40	314.5	2.7
237	00	Black Oak	8	229.3	1.0
		Red Maple	324	5837.8	59.0
		Sweet Gum	17	419.3	6.0
	The state of the s	Total	389	6800.9	68.7
297	69	Black Cherry	5	39.3	0.2
-		Sweet Gum	6	147.4	0.8
		Total	TI	186.7	1.0
297	70	Black Cherry	25	196.6	3.5
		Persimmon	4	52.4	0.5
		Sweet Gum	148	3636.4	38.0
		Total	177	3885.4	42.0
298	21	American Elm	22	409.5	4.0
		Black Cherry	18	140.9	1.0
		Black Locust	309	809.2	11.9
the state of the s	CO*C - 1 - 0 - 1 - 1 - 1 - 1 - 1	Total	349	1359.6	16.9
298	22	American Elm	17	317.8	3.0
		Black Cherry	40	314.5	3.0
		Black Locust	58	150.7	2.0
		Total	115	783.0	8.0
			- 110	, 55.0	0.0

	_		Number	Leaf Surface	Dry
Day of	Box	Cnooise.	of	Area	Weight
1974	Number	Species	Leaves	(cm²)	(g)
298	23	American Elm	13	242.4	4.0
		Black Locust	50	131.0	1.5
		Total	63	373.4	5.5
200	24	American Clm	16	200 1	2.0
298	24	American Elm Black Locust	16 15	298.1 39.3	3.0 0.5
		Black Walnut	2	13.1	1.0
		Tulip Poplar	7	27.9	3.0
		Total	. 40	378.4	7.5
298	25	American Elm	2	36.0	0.2
***************************************		Black Locust	27	72.1	1.5
		Total	29	108.1	1.7
298	26	American Elm	6	111.4	1.5
		Black Cherry	55	432.4	5.0
		Black Locust	22	59.0	0.3
		Red Maple	1	19.7	0.1
		Sweet Gum	30	737.1	5.0
		Tulip Poplar	25	976.2	11.9
		Total	139	2335.8	23.8
298	27	American Elm	73	1362.8	12.5
		Black Locust	64	167.1	2.0
		Total	137	1529.9	14.5
000	00	Λ	7.0	227.4	0.5
298	28	American Elm	18	337.4	2.5
		Black Locust Sweet Gum	191	501.2 26.2	6.0 0.2
		Total	210	864.8	8.7
		10001	210	00110	0.,
298	29	American Elm	60	1120.4	12.05
		Black Locust	68	176.9	2.0
		Total	128	1297.3	14.05
298	30	American Elm	29	540.5	7.0
230	00	Black Locust	96	252.2	3.0
		Sweet Gum	3	75.3	0.2
		Total	128	868.0	10.2
298	51	Red Maple	2	55.7	0.4
230	31	Sassafras	3	65.5	2.4
		Sweet Gum	4	98.3	1.0
	· · · · · · · · · · · · · · · · · · ·	Total	10	219.5	3.8

- Contract Contract			Numbara	Leaf Surface	Diale
Day of	Box		Number of	Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
13/7	Mulliper	эрсстсэ	Leaves	( Oili )	(9/
298	52	Black Cherry	5	39.3	0.5
		Dogwood	32	419.3	7.0
		Pin Oak	• 5	104.8	1.0
		Sassafras	2	45.9	0.3
		Sweet Gum	17	419.3	4.7_
		Total	61	1028.6	13.5
298	53	Davasimman	6	81.9	2.7
290	55	Persimmon Sassafras	6 17	380.0	3.0
		Sweet Gum	10	245.7	5.4
		Total	33	707.6	11.1
		Ισται	33	707.0	11.1
298	54	Black Cherry	2	16.4	0.2
		Sweet Gum	2 5	124.5	5.0
		Total	7	140.9	5.2
298	55	Die als Chauss	F	20.2	0.5
290	22	Black Cherry	5 5	39.3 65.5	0.5 2.5
		Dogwood Persimmon	28	376.7	8.5
		Sweet Gum	29	714.2	12.0
The second second second		Total	67	1195.7	23.5
		10001	07	1133.7	20.0
298	56	Black Cherry	2	16.4	0.5
		Red Maple	4	72.1	0.9
		Sassafras	1	22.9	0.2
		Total	7	111.4	1.6
298	57	Persimmon	4	52.4	0.5
230	0,	Sweet Gum	31	763.3	9.0
		Tulip Poplar	j	39.3	1.0
		Total	36	855.0	10.5
000					
298	58	Black Cherry	2	16.4	0.3
		Box Elder	40	242.4	5.0
		Persimmon	153	2054.0	16.5
		Sweet Gum	123	3023.7	49.0
		Tulip Poplar Total	319	39.3 5375.8	71.8
			313	33/3.0	71.0
298	59	Black Cherry	38	298.1	4.2
		Persimmon	28	376.7	4.5
		Spanish Oak	2	42.6	0.05
		Sweet Gum	25	615.9	10.5
		Total	93	1333.3	19.25

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
				26.0	0.0
298	60	American Elm	2	36.0	0.3
		Black Cherry	1 21	6.5 380.0	0.2 2.5
		Red Maple	1	22.9	0.05
		Sassafras Sweet Gum	75	1844.4	29.9
		Tulip Poplar	23	897.6	8.8
***		Total	123	3187.4	41.75
200	7	D t.	2005	F007 2	22.2
302	1	Beech	265 19	5297.3 547.1	22.3 9.75
		Black Oak Red Maple	50	900.9	7.6
		Spanish Oak	2	42.6	0.3
		Tupelo	10	173.6	1.45
		White Oak	70	1412.0	21.1
		Total	416	8373.5	62.5
302	2	Black Oak	8	229.3	4.3
302	_	Scarlet Oak	25	835.4	12.9
		Spanish Oak	36	753.5	8.3
		Tupelo	16	278.5	2.85
		White Oak	121	2440.6	29.9
		Total	206	4537.3	58.25
302	3	Black Oak	11	317.8	5.25
		Dogwood	3	39.3	0.45
		Red Maple	1	19.7	0.15
		Scarlet Oak	8	268.6	3.5
		Spanish Oak	110	2303.0	29.1
		Sweet Gum	4 25	98.3	0.75
		Tupelo White Oak	171	435.7 3449.6	4.75 44.9
		Total .	333	6932.0	88.85
302	4	Beech	115		11 5
302	4	Black Oak	113	2299.7 317.8	11.5 6.7
		Chestnut Oak	'i	22.9	0.5
		Red Maple	107	1929.6	15.1
		Scarlet Oak	iii	366.9	4.6
		Spanish Oak	2	42.6	0.65
		Tupelo	24	419.3	4.55
		Virginia Pine	49	160.5	1.0
		White Oak	28	563.5	6.9
		Total	348	6122.8	51.5

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
302	5	Beech Black Oak Chestnut Oak Red Maple Scarlet Oak Sweet Gum Tupelo White Oak Total	13 25 1 24 62 5 40 80	258.8 720.7 22.9 432.4 2070.4 124.5 697.8 1615.1	1.5 18.35 0.45 4.85 27.9 0.6 9.0 17.05
302	6	Beech Black Oak Chestnut Oak Red Maple Scarlet Oak Sweet Gum Tupelo White Oak Total	4 17 8 6 3 7 25 86	78.6 491.4 173.6 108.1 101.6 173.6 435.7 1736.3	0.4 8.9 3.85 0.7 2.2 2.9 3.45 26.2 48.6
302	7	Beech Black Oak Dogwood Red Maple Scarlet Oak Spanish Oak Sweet Gum Tupelo White Oak	49 40 14 15 36 18 15 36 107 330	979.5 1153.1 183.5 271.9 1202.3 376.7 370.2 629.0 2158.9	4.4 21.6 1.7 1.9 12.9 3.3 3.6 6.5 26.9
302	8	Black Oak Chestnut Oak Red Maple Scarlet Oak Tupelo Virginia Pine White Oak	39 3 19 43 29 35 63 231	1123.7 65.5 344.0 1438.2 504.5 114.7 1271.1 4861.7	16.5 1.0 4.0 22.6 6.5 0.7 14.0 65.3

ier			Number	Leaf Surface	Dry
Day of	Box	Chasias	of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
302	9	Beech	102	2037.7	13.4
		Black Oak	3	85.2	2.2
		Chestnut Oak	- 14	307.9	6.0
		Red Maple	34	612.6	5.2
		Scarlet Oak	4	134.3	1.9
		Tupelo	13	226.0	1.9
		Virginia Pine	15	49.1	0.3
		White Oak	108	2178.5	28.65
		Total	293	5631.3	59.55
202	7.0	Decemb	0	7.00 5	0.0
302	10	Beech	8	160.5	0.8
		Black Oak	53	1526.6	29.35
		Chestnut Oak	27	589.7	7.6
		Tupelo	49	855.0	8.9
and the second of the second o	~	White Oak Total	93 230	1877.1 5008.9	19.2 65.85
		10 ca 1	230	3000.9	05.05
302	41	Black Cherry	41	321.0	4.1
<b>~~~</b>	• •	Sweet Cherry	6	85.2	0.65
		Sweet Gum	108	2653.6	24.7
COMMENTS CONTINUES CANADISC ACCORDING AND ADMINISTRATION		Total	155	3059.8	29.45
302	42	Black Cherry	6 3	45.9	0.6
		Dogwood	3	39.3	0.4
		Red Maple	5	91.7	0.7
		Tulip Poplar	11	429.2	8.4
		Sweet Gum	55	1353.0	19.2
		Total	80	1959.1	29.3
302	43	Black Cherry	81	635.5	6.7
JUL	73	Red Maple	11	199.8	1.45
		Sweet Gum	74	1818.2	18.6
		Tulip Poplar	6	216.2	2.75
Control of the Contro		Total	172	2869.7	29.5
302	44	Black Cherry	122	959.9	8.2
		Scarlet Oak	7	925	1.0
		Sweet Gum	49	1205.6	16.5
	Charles (Charles and Charles a	Tulip Poplar	5	195.6	2.2
		Total	183	2361.1	27.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
302	45	Black Cherry Dogwood Red Maple Sweet Gum Tulip Poplar Total	39 6 15 92 21	307.9 78.6 271.9 2260.4 819.0	4.2 0.65 1.8 27.0 7.15 40.8
302	46	Sweet Gum Tulip Poplar Total	101 5 106	2483.2 196.6 2679.8	45.55 1.8 47.35
302	47	Black Cherry Dogwood Sweet Gum Tulip Poplar Total	37 4 250 3 294	291.6 52.4 6142.5 117.9 6604.4	4.3 0.6 98.3 0.55 103.75
302	48	Sweet Gum Tulip Poplar Total	43 74 117	1058.1 2886.2 3944.3	15.7 38.1 53.8
302	49	Black Cherry Sweet Gum Tulip Poplar Total	132 219 5 356	1038.5 5382.5 196.6 6617.6	13.1 66.6 3.3 83.0
302	50	Black Cherry Sweet Gum Tulip Poplar Total	66 221 15 302	517.6 5431.6 586.4 6535.6	10.9 40.55 6.5 57.95
303	31	Beech Black Oak Hickory Scarlet Oak Spanish Oak Sweet Gum Tulip Poplar Virginia Pine White Oak	301 15 23 11 32 19 9 11 8	6014.7 432.4 504.5 366.9 668.3 468.5 350.5 36.0 160.5	29.1 8.0 5.4 5.3 8.9 10.1 2.0 0.3 3.4

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
303	32	Beech	340	6794.4	38.2
		Black Oak	7	203.1	2.7
		Chestnut Oak	2	42.6	0.5
		Dogwood	31	406.2	3.6
		Hickory	11	242.4	0.7
		Scarlet Oak	6	199.8	2.7
		Spanish Oak	43	900.9	11.3
		Sweet Gum	138	3390.7	50.1
		Tulip Poplar	5	196.6	1.6
		White Oak	19	383.3	6.5
		Total	602	12760.0	117.9
303	33	Beech	242	4835.4	36.2
000	33	Black Oak	56	1615.1	22.7
		Hickory	5	111.4	1.7
		Red Maple	8	144.1	0.5
		Spanish Oak	106	2217.8	28.7
		Sweet Gum	.33	812.4	7.9
		Tulip Poplar	19	740.4	5.4
		Total	469	10476.6	103.1
303	2.4	Danak	425	0004 5	42.0
303	34	Beech Black Oak	435 10	8694.5 288.3	42.8
			70	1464.4	6.6 27.2
		Spanish Oak Tulip Poplar	131	5107.3	43.5
		Virginia Pine	16	5107.3	0.3
		White Oak	15	301.4	3.0
		Total	677	15908.3	123.4
		10001	077	10300.0	120.1
303	35	Beech	442	8832.1	49.0
		Chestnut Oak	1	22.9	0.5
		Dogwood	3	39.3	0.2
		Hickory	5 1	111.4	2.2
		Red Maple		19.7	0.1
		Spanish Oak	36	753.5	11.3
		Sweet Gum	26	638.8	7.5
		Tulip Poplar	40	1559.4	14.5
		Virginia Pine	17	55.7	0.4
		White Oak	1	19.7	0.2
		Total	572	12052.5	85.9

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
303	36	Beech Chestnut Oak Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak Total	405 10 41 70 31 118 2	8095.0 219.5 900.9 1464.4 763.3 4599.5 39.3	43.9 3.5 7.8 20.9 9.3 33.9 0.5
303	37	Beech Black Oak Hickory Spanish Oak Sweet Gum Tulip Poplar Total	462 1 5 194 9 38	9231.8 29.5 111.4 4062.2 222.8 1480.7	57.6 0.7 2.5 51.1 3.5 10.3
303	38	Beech Black Oak Hickory Spanish Oak Tulip Poplar White Oak	539 28 3 24 8 4	10771.5 805.9 65.5 501.2 311.2 81.9	64.8 24.1 1.0 8.1 1.8 1.0
303	39	Beech Black Oak Dogwood Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak	365 28 8 49 53 12 40 8	7295.6 805.9 104.8 1074.5 1110.6 294.8 1559.4 160.5	41.7 20.6 0.7 9.8 16.9 2.7 8.0 1.0
303	40	Beech Dogwood Mockernut Hickory Scarlet Oak Sweet Gum Tulip Poplar White Oak Total	336 2 25 4 35 26 40	6715.8 26.2 550.4 134.3 861.6 1012.3 805.9	46.8 0.4 5.9 2.4 14.5 8.8 20.8

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
303	71	Red Maple	1	19.7	0.2
303	73	Black Willow	13	144.1	0.5
303	74	Red Maple	8	144.1	1.15
303	76	Black Willow Red Maple Total	5 1 6	55.7 19.7 75.4	0.25 0.1 0.35
303	77	Red Maple Spanish Oak Sweet Gum Tulip Poplar Total	9 13 3 2 27	163.8 271.9 75.3 78.6 589.6	0.75 3.7 1.05 0.5
303	78	Red Maple Scarlet Oak Total	1 3 4	19.7 101.6 121.3	0.1 0.35 0.45
303	79	Black Willow Red Maple Sweet Gum Sycamore	13 6 2 1	144.1 108.1 49.1 42.6	0.3 0.8 0.3 2.4
303	80	Total Persimmon Pin Oak Red Maple Sweet Gum Tulip Poplar Total	22 3 13 2 3 1 22	343.9 39.3 268.6 36.0 75.3 39.3 458.5	3.8 0.35 1.8 0.2 1.1 0.6 4.05
304	11	Beech Dogwood Hickory Red Maple Scarlet Oak Sweet Gum Sycamore Tulip Poplar White Oak	129 43 42 46 2 31 2 204 9	2578.2 563.5 920.6 828.8 65.5 763.3 85.2 7954.1 180.2	6.2 4.0 5.45 4.6 1.4 3.4 1.2 71.2 1.2 98.65

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
304	12	Beech Black Oak Dogwood Hickory Red Maple Scarlet Oak Sweet Gum Tulip Poplar White Oak	174 20 44 28 204 12 20 57 12	3475.8 576.6 576.6 615.9 3675.7 399.7 491.4 2221.1 242.4 12275.2	15.5 24.1 4.9 4.9 46.9 6.9 4.6 17.0 3.0
304	13	Beech Black Oak Dogwood Hickory Red Maple Sweet Gum Sycamore Tulip Poplar Tupelo White Oak Total	309 15 18 10 15 66 3 256 9 2	6175.3 432.4 235.9 219.5 271.9 1621.6 127.8 9978.7 157.2 39.3 19259.6	29.6 12.2 2.0 1.7 8.5 15.0 1.1 83.35 1.0 0.5
304	14	Beech Black Oak Hickory Red Maple Spanish Oak Sweet Gum Tulip Poplar White Oak	175 33 9 3 40 1 2 139 402	3498.8 950.0 196.6 55.7 838.7 26.2 78.6 2804.3	21.6 25.4 2.3 0.4 11.1 0.4 1.0 20.8
304	15	Beech Black Oak Dogwood Hickory Hornbeam Post Oak Red Maple Sassafras Spanish Oak	51 8 70 27 8 14 92 5	1018.8 229.3 917.3 593.0 45.9 340.7 1657.7 111.4 167.1	6.5 6.7 9.3 6.8 0.4 4.8 21.25 0.4 1.6

Day of	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
304	15	Sweet Gum Tulip Poplar Tupelo White Oak Total	191 5 4 71 554	4694.5 196.6 68.8 1431.6	76.8 2.4 0.5 17.6 155.05
304	16	Beech Black Oak Dogwood Hickory Hornbeam Spanish Oak Sweet Gum White Oak	123 26 23 14 164 97 34 56	2457.0 750.2 301.4 307.9 923.8 2031.1 835.4 1130.2	14.85 18.4 1.6 1.8 4.7 26.3 8.1 14.5
304	17	Beech Black Cherry Black Oak Dogwood Hickory Hornbeam Post Oak Spanish Oak Sweet Gum Tupelo Virginia Pine White Oak	39 4 32 60 7 13 1 55 95 2 43 47	779.7 32.7 923.8 786.2 154.0 72.1 22.9 1153.1 2335.8 36.0 140.9 950.0	4.6 0.1 24.05 5.8 1.1 0.3 0.8 15.9 23.9 0.6 0.6 12.65
304	18	Black Oak Dogwood Spanish Oak Sweet Gum White Oak Total	77 84 317 58 31 567	2221.1 1100.7 6637.2 1425.1 625.7	52.8 10.4 81.15 16.25 20.5
304	19	Beech Black Oak Chestnut Oak Dogwood Hickory Red Maple	52 17 30 47 5 77	1038.5 491.4 655.2 615.9 111.4 1389.0	7.0 12.0 19.6 5.3 1.3

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
304	19	Spanish Oak Sweet Gum Tulip Poplar White Oak Total	111 104 6 130 579	2322.7 2555.3 232.6 2624.1 12036.1	32.0 25.9 1.4 32.9 149.2
304	20	Beech Black Oak Dogwood Hickory Spanish Oak Sweet Gum Tupelo Virginia Pine White Oak	219 2 28 33 77 62 31 25 18	4376.7 59.0 366.9 724.0 1611.8 1523.3 540.5 81.9 366.9	29.6 1.9 3.7 4.0 19.35 23.1 8.9 0.6 3.3 94.45
304	61	American Elm Red Maple Scarlet Oak Sweet Gum Total	1 131 10 6 148	19.7 2362.0 334.1 147.4 2863.2	0.2 15.0 2.2 3.0 20.4
304	62	Pin Oak Red Maple Sweet Gum Total	298 140 14 452	6168.7 2522.5 343.9 9035.1	48.5 15.4 2.65 66.55
304	63	Red Maple Scarlet Oak Total	1 1 2	19.7 32.8 52.5	0.1 0.5 0.6
304	64	Black Cherry Red Maple Sweet Gum Tulip Poplar Total	49 119 21 2	386.6 2145.8 517.6 78.6 3128.6	4.15 12.3 12.55 0.8 29.8
304	65	Red Maple Sweet Gum Tulip Poplar Total	1 27 2 30	19.7 665.0 78.6 763.3	0.1 9.6 0.1 9.8

	THE STATE OF THE S		Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
		Species	Leaves	(cm <sup>2</sup> )	(g)
1974	Number	Species	Leaves		(9)
304	66	Black Cherry	78	612.6	9.2
304	00		1	19.7	0.1
		Pin Oak	- '		
		Scarlet Oak		32.8	0.2
		Total	80	665.1	9.5
304	67	American Elm	27	504.5	5.1
304	07		17	350.5	3.35
		Pin Oak			
		Red Maple	131	2362.0	15.8
		Sweet Gum	37	910.7	11.85
		Total	212	4127.7	36.1
304	68	American Elm	17	317.8	3.85
304	00	Black Cherry	135	1061.4	9.6
		Red Maple	1078	19423.4	157.1
CHITTEE managhamaghaman is with decrease; row any autocle	and the state of t	Sweet Gum	16	393.1	7.0
		Total	1246	21195.7	177.55
304	70	American Elm	4	75.3	0.3
304	70	Black Cherry	19	150.7	2.45
			13		
		Sassafras	•	22.9	0.1
WWW.		Sweet Gum	180	4422.6	64.75
		Total	204	4671.5	67.6
305	21	American Elm	88	1644.6	19.7
303		Black Cherry	16	124.5	1.1
			1000	2620.8	34.7
		Black Locust			
		Total	1104	4389.9	55.5
305	22	American Elm	58	1084.4	11.9
	*	Black Cherry	60	471.7	5.1
		Black Locust	678	1775.6	28.5
			796	3331.7	45.5
		Total	790	3331.7	40.0
305	23	American Elm	20	373.5	4.1
		Black Cherry	5	39.3	0.4
		Black Locust	461	1208.8	17.3
DAVIDA Victor and a second discount		Total	486	1621.6	21.8
305	24	American Elm	9	167.1	2.35
		Black Locust	19	49.1	0.8
		Black Walnut	7	49.1	1.1
		Total	35	265.3	4.25
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Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
305	25	American Elm Black Locust Tulip Poplar Total	3 67 2 72	55.7 176.9 78.6 311.2	0.5 3.4 1.8 5.7
305	26	American Elm Black Cherry Black Oak Red Maple Spanish Oak Sweet Gum Tulip Poplar	75 269 4 25 18 18 42 451	1402.1 2116.3 114.7 452.1 376.7 442.3 1638.0	11.9 27.05 1.7 4.3 4.85 2.9 11.35 64.05
305	27	American Elm Black Locust Total	73 70 143	1362.8 183.5 1546.3	15.2 2.6 17.8
305	28	American Elm Black Locust Sweet Gum Total	125 1010 3 1138	2335.8 2647.0 75.3 5058.1	20.3 37.9 0.6 58.8
305	29	American Elm Black Locust Total	131 167 298	2447.2 439.0 2886.2	22.3 5.1 27.4
305	30	American Elm Black Locust Chestnut Oak Sweet Gum Tulip Poplar Total	33 112 26 7 2	615.9 294.8 570.0 173.6 78.6	7.8 4.8 4.5 2.3 0.25
305	51	Black Cherry Sweet Gum Total	1 4 5	6.5 98.3 104.8	0.05 0.9 0.95
305	52	Sassafras Sweet Gum Total	4 6 10	88.4 147.4 235.8	0.7 1.1 1.8

Forest Ecology Litter Box Data - 1974

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
305	53	Black Cherry Sassafras Sweet Gum	3 19 7	22.9 422.6 173.6	0.2 2.25 2.0
		Total	29	619.1	4.45
305	54	Black Cherry Sweet Gum Total	6 8 14	45.9 196.6 242.5	0.5 3.15 3.65
305	55	Black Cherry Dogwood Persimmon	11 19 7	85.2 249.0 95.0	1.1 2.4 1.75
		Sweet Gum Total	97 134	2384.9 2814.1	26.5 31.75
305	56	Black Cherry Red Maple Sweet Gum Total	3 4 6	22.9 72.1 147.4 242.4	0.3 0.3 1.1
305	57	Black Cherry Sweet Gum Total	2 57 59	16.4 1402.1 1418.5	0.25 17.85 18.1
305	58	Box Elder Persimmon Sweet Gum Total	32 16 88	196.6 216.2 2162.2 2575.0	2.75 2.9 31.6 37.25
305	59	Black Cherry Persimmon Spanish Oak Sweet Gum Total	16 20 18 99	124.5 268.6 376.7 2434.1 3203.9	1.8 3.45 6.55 34.0 45.8
305	60	American Elm Red Maple Sweet Gum Tulip Poplar Total	4 1086 249 39	75.3 19567.5 6119.6 1520.1 27282.5	0.9 110.55 64.7 14.25

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
309	1	Beech Black Oak Red Maple Scarlet Oak Spanish Oak Tupelo White Oak Total	49 38 2 17 1 3 222 332	979.5 1094.2 36.0 566.7 19.7 52.4 4481.6 7230.1	3.8 24.5 0.2 10.9 0.25 0.7 63.0
309	2	Black Oak Red Maple Scarlet Oak Spanish Oak Sweet Gum Tupelo White Oak	31 2 91 53 1 6 252 436	894.3 36.0 3040.9 1110.6 26.2 101.6 5084.3	20.2 0.3 51.45 12.35 0.4 0.5 71.9
309	3	Black Oak Dogwood Hickory Red Maple Sassafras Scarlet Oak Spanish Oak Sweet Gum Tupelo White Oak	17 10 7 28 7 4 366 8 6 194	491.4 131.0 154.0 504.5 157.2 134.3 7662.6 196.6 104.8 3914.8	10.1 1.2 1.3 2.15 1.15 0.8 89.6 1.9 0.8 56.9
309	4	Black Oak Red Maple Scarlet Oak Spanish Oak Virginia Pine White Oak Total	25 360 43 14 224 70 736	737.1 6486.5 1438.2 291.6 7338.2 1412.0	21.7 48.85 16.0 3.85 3.9 18.1
309	5	Black Oak Red Maple Sassafras Scarlet Oak Tupelo Virginia Pine White Oak	27 27 7 30 19 9 290 409	779.7 488.1 157.2 1002.5 330.9 294.8 5850.9	18.75 2.5 1.0 15.0 3.15 0.1 79.1

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
309	6	American Elm Black Oak Dogwood Red Maple Scarlet Oak	1 5 3 3 6	19.7 144.1 39.3 55.7 199.8	0.1 2.4 0.45 0.3 2.9
		Spanish Oak Tupelo White Oak	5 8 381	104.8 140.9 7688.8	0.8 1.0 107.8
	Michigan Maratin en de maratin de	Total	412	8393.1	115.75
309	7	Black Oak Dogwood Hickory Red Maple	36 17 5 114	1038.5 222.8 111.4 2054.0	16.15 1.6 1.25 14.85
		Scarlet Oak Spanish Oak Sweet Gum Tupelo	185 6 4 25	6181.8 124.5 98.3 435.7	70.55 1.0 1.45 4.5
dans the \$5 country in processing was a glass processing a processing country country country		White Oak Total	160 552	3226.9 13493.9	60.75
309	8	American Elm Black Oak Chestnut Oak Red Maple Scarlet Oak Spanish Oak Tupelo Virginia Pine White Oak	6 6 70 15 15 55 180 256	111.4 173.6 131.0 1261.3 501.2 314.5 959.9 5896.8 5166.2	0.7 2.65 3.2 11.55 9.35 5.7 6.3 3.2 60.8
309	9	Beech Chestnut Oak Red Maple Scarlet Oak Spanish Oak Tupelo	254 5 18 3 8 16	5074.5 108.1 324.3 101.6 167.1 278.5	28.9 1.3 1.4 1.0 1.75 2.4
	Cook of the Charles of the State of the Stat	White Oak Total	329 633	6640.4 12694.5	75.75

Forest Ecology Litter Box Data - 1974

			Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
309	10	Beech Black Oak	5 24	101.6 691.2	0.3 9.8
		Chestnut Oak	7	154.0	1.5
		Spanish Oak	20	419.3	4.9
****		White Oak	439	8697.8	86.6
		Total	495	10063.9	103.1
309	41	Black Cherry	150	1179.4	12.0
		Dogwood	3	39.3	0.5
		Sweet Cherry Sweet Gum	56 67	789.5 1647.8	4.4 23.1
		Tulip Poplar	í	39.3	0.3
		Total	277	3695.3	40.3
309	42	Black Cherry	8	62.2	0.85
		Sweet Gum	45	1107.3	14.1
		Tulip Poplar	6	232.6	2.35
		Total	59	1402.1	17.3
309	43	Black Cherry	267	2100.0	22.0
		Red Maple	12	216.2	1.6
		Sweet Gum Sycamore	142 1	3488.9 42.6	42.5 0.65
		Tulip Poplar	6	232.6	1.65
the Carrier of the Carrier Carrier of Carrier over	Secretaria de la composición del composición de la composición del composición de la composición del composición de la composición del composición de la composición del composición del composición del composición del composición	Total	428	6080.3	68.4
309	44	Black Cherry	207	1628.2	16.6
		Persimmon	6	81.9	1.0
		Red Maple	3	55.7	0.4
		Scarlet Oak Sweet Gum	11 72	366.9 1769.0	1.75 24.9
		Tulip Poplar	9	350.5	3.75
		Total	308	4252.2	48.4
309	45	Black Cherry	28	219.5	2.8
		Red maple	55	992.6	6.8
		Sweet Gum Tulip Poplar	127 14	3122.0	35.5
		Total	224	547.1 4881.2	3.1 48.2
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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
309	46	Black Cherry Sweet Gum Tulip Poplar	3 176 6	22.9 4 4.3 232.6	0.75 71.7 2.7
		Total	185	4579.8	75.15
309	47	Black Cherry Dogwood Sweet Gum Total	55 35 215 305	432.4 458.6 5284.2 6175.2	8.6 5.25 61.05 74.9
		Ισται	303	01/3.2	74.9
309	408	Sweet Gum Tulip Poplar Total	37 75 112	910.7 2925.5 3836.2	13.3 21.0 34.3
309	409	Black Cherry Sweet Gum Tulip Poplar Total	280 293 3 576	2201.5 7200.6 117.9 9520.0	42.0 106.0 2.85 150.85
309	50	Black Cherry Sweet Gum Tulip Poplar Total	188 150 6 344	1477.5 3685.5 232.6 5395.6	17.65 59.8 3.65 81.1
310	31	Beech Black Oak Chestnut Oak Hickory Scarlet Oak Spanish Oak Sweet Gum Tulip Poplar Virginia Pine White Oak	496 24 7 62 44 175 6 17 39 7	9913.2 691.2 154.0 1359.5 1470.9 3662.6 147.4 661.7 127.8 140.9	47.3 9.0 2.0 11.3 21.6 55.75 2.7 3.5 0.75 2.15
310	32	Beech Black Oak Dogwood Hickory Scarlet Oak Spanish Oak Sweet Gum Tulip Poplar White Oak	602 10 106 43 17 184 73 22 53	12029.5 288.3 1389.0 943.5 566.7 3852.6 1795.2 858.3 1068.0	70.3 2.4 12.0 9.6 6.75 52.95 25.0 7.5 15.6

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
07.0	22	D 1	500	11640 5	C1 0
310	33	Beech	583	11649.5	61.9
		Black Oak	86	2479.9	30.35
		Hickory	19	416.0	4.85
		Red Maple	10	180.2	1.0
		Spanish Oak	155	3243.2	38.25
		Sweet Gum	34	835.4	10.6
		Tulip Poplar	19	740.4	4.0
		Virginia Pine	21	68.8	0.3
		White Oak	4	81.9	0.75
		Total	931	19695.3	152.0
310	34	Beech	530	10591.3	48.0
		Black Oak	7	203.1	4.0
		Hickory	78	1713.3	14.35
		Spanish Oak	204	4271.9	56.2
		Tulip Poplar	180	7017.2	48.3
		Virginia Pine	200	655.2	3.0
		White Oak	92	1857.5	21.6
		Total	1291	26309.5	195.45
310	35	Beech	517	10332.5	49.7
0.0	00	Dogwood	5	65.5	0.4
		Hickory	56	1228.5	10.15
		Hornbeam	31	173.6	0.7
		Spanish Oak	83	1736.3	23.75
		Sweet Gum	92	2260.4	27.0
		Tulip Poplar	95	3705.2	29.15
		Virginia Pine	23	75.3	0.4
		White Oak	18	363.6	4.4
		Total	920	19940.9	145.65
310	36	Pooch	602	12040 1	11 EE
310	30	Beech Chestnut Oak	603 3	12049.1 65.5	44.55
		Dogwood	8	104.8	0.85 1.0
		Hickory	64	1405.4	11.35
		Spanish Oak	246	5149.9	72.35
		Sweet Gum	37	910.7	15.4
		Tulip Poplar	178	6938.6	47.05
		White Oak	32	645.4	9.7
		Total	1171	27269.4	202.25
		10001	11/1	LILUJ.T	202.23

			Number	Leaf Surface	Dny
Day of	Box		of	Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
310	37	Beech	207	4137.6	17.8
		Hickory	56	1228.5	8.7
		Spanish Oak	227	4753.5	58.6
		Tulip Poplar	62	2417.7	16.1
4	·····	White Oak	3	59.0	0.6
		Total	555	12596.3	101.8
310	38	Beech	359	7174.4	39.6
		Black Oak	64	1844.4	54.6
		Hickory	28	615.9	6.0
		Spanish Oak	117	2450.4	30.3
		Sweet Gum	3	75.3	0.75
		Tulip Poplar	14	547.1	2.7
		Virginia Pine	52	170.3	0.75
		White Oak	168	3390.7	43.75
		Total	805	16268.5	178.45
310	39	Beech	277	5536.4	26.25
		Black Oak	18	517.6	16.7
		Dogwood	25	327.6	2.15
		Hickory	251	5510.2	43.2
		Spanish Oak	98	2050.8	28.1
		Sweet Gum	12	294.8	3.8
		Tulip Poplar	135	5264.5	32.5
		Virginia Pine White Oak	45 38	147.4 766.6	0.7 9.9
		Total	899	20415.9	163.3
07.0	40		4.4.0	0070 0	40.0
310	40	Beech	449	8973.0	48.0
		Black Oak	24 13	691.2 170.3	12.8 2.2
		Dogwood Hickory	97	2129.4	17.15
		Spanish Oak	4	85.2	1.13
		Sweet Gum	15	370.2	5.55
		Tulip Poplar	78	3040.1	21.5
		White Oak	16	324.3	5.45
		Total	696	15783.7	113.65
310	71	Red Maple	2	36.0	0.2
310	<i>,</i> 1	Spanish Oak	2	42.6	.0.8
		White Oak	2 2 2	39.3	0.35
		Total	6	117.9	1.35

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
310	72	Beech Black Locust Spanish Oak Tulip Poplar Total	3 3 1 1 8	59.0 6.5 19.7 39.3	0.4 0.2 0.3 0.1
310	73	Black Locust Scarlet Oak Tulip Poplar White Oak Total	3 1 1 2 7	6.5 32.8 39.3 39.3	0.2 0.2 0.15 0.5
310	74	Beech Red Maple Spanish Oak Total	1 13 5 19	19.7 235.9 104.8 360.4	0.1 0.85 0.8 1.75
310	75	Spanish Oak Tulip Poplar Total	1 1 2	19.7 39.3 59.0	0.2 0.5 0.7
310	76	Beech Red Maple Sweet Gum Tulip Poplar	1 1 2 1	19.7 19.7 49.1 39.3	0.1 0.1 0.25 0.1
310	77	Total  Black Cherry Pin Oak Red Maple Spanish Oak Sweet Gum Tulip Poplar	5 4 3 24 195 1 3 230	127.8 32.8 62.2 432.4 4081.9 26.2 117.9	0.5 0.45 0.5 1.55 65.0 0.35 0.8
310	78	Total Black Cherry Spanish Oak Total	1 2 3	4753.4 6.5 42.6 49.1	0.05 0.7 0.75
310	79	American Elm Red Maple Sweet Gum Total	2 49 8 59	36.0 884.5 196.6	0.65 4.0 2.0 6.65

D 0			Number	Leaf Surface	Dry
Day of	Box		of .	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
210	80	Din Oak	28	E70 0	E E
310	00	Pin Oak		579.8	5.5
		Sweet Gum Total	6 34	147.4 727.2	1.85 7.35
		local	34	121.2	7.35
311	11	Beech	36	720.7	2.0
• • • • • • • • • • • • • • • • • • • •	• •	Dogwood	54	707.6	5.05
		Hickory	119	2611.0	19.3
		Red Maple	219	3947.6	24.35
		Sweet Gum	23	566.7	8.5
		Tulip Poplar	321	12514.3	109.0
		White Oak	63	1271.1	15.5
		Total	835	22339.0	183.7
311	12	Beech	28	560.2	2.0
		Black Oak	49	1412.0	43.0
		Dogwood	40	524.2	5.2
		Hickory	135	2964.8	22.4
		Red Maple	36	648.6	8.2
		Scarlet Oak	53	1772.3	24.6
		Sweet Gum	13	321.0	3.45
		Tulip Poplar	81 118	31 <u>5</u> 8.1 2381.6	20.5
		White Oak Total	553	13742.8	36.5 165.85
		10001	333	13/42.0	105.05
311	13	Beech	47	940.2	5.35
		Black Oak	8	229.3	4.3
		Dogwood	29	380.0	3.35
		Hickory	37	812.4	5.6
		Red Maple	20	360.4	2.6
		Sweet Gum	33	812.4	13.0
		Sycamore	3	127.8	4.6
		Tulip Poplar	268	10450.4	82.6
		Tupelo	14	242.4	1.85
		White Oak	12	242.4	2.65
		Total	471	14597.7	125.9
311	14	Beech	28	560.2	3.7
011	1.7	Black Oak		229.3	4.2
		Dogwood	8 23	301.4	2.2
		Hickory	36	789.5	5.0
		Red Maple	16	288.3	3.3
		Spanish Oak	84	1759.2	26.1
		Sweet Gum	3	75.3	0.7
		Tulip Poplar	14	547.1	4.9
		White Oak	586	11826.4	138.3
		Total	798	16376.7	188.4

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
311	15	Beech Dogwood Hickory Red Maple Sassafras Spanish Oak Sweet Gum Tulip Poplar Virginia Pine White Oak	19 107 145 16 13 71 31 2 110 76	380.0 1402.1 3184.3 288.3 288.3 1487.3 763.3 78.6 360.4 1533.2	1.35 14.9 28.6 3.1 2.7 19.45 10.75 1.2 2.55 25.1
311	16	Beech Black Oak Dogwood Hickory Hornbeam Spanish Oak Sweet Gum White Oak	13 20 18 108 102 115 43 42	258.8 576.6 235.9 2371.8 573.3 2407.9 1051.6 848.5	1.8 15.7 1.9 19.5 4.1 27.6 16.35 12.25
311	17	Beech Black Cherry Dogwood Hickory Spanish Oak Sweet Gum Virginia Pine White Oak Total	121 60 70 25 34 44 104 15	2417.7 786.2 917.3 550.4 710.9 1081.1 340.7 301.4	12.7 3.3 8.2 4.5 7.45 15.8 1.75 4.0
311	18	Black Oak Dogwood Hickory Spanish Oak Sweet Gum Virginia Pine White Oak Total	16 98 5 188 239 13 20	461.9 1284.2 111.4 3934.5 5873.9 42.6 402.9	12.0 15.2 1.7 54.2 72.6 0.25 5.45
311	19	Beech Chestnut Oak Dogwood Hickory Red Maple	41 2 62 26 5	819.0 42.6 812.4 570.0 91.7	4.5 1.8 9.1 3.2 0.9

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
311	19	Spanish Oak	46	936.1	13.8
•		Sweet Gum	64	1572.5	23.0
		Tulip Poplar	9	350.5	2.7
		Virginia Pine	18	59.0	0.4
		White Oak	113	2280.1	33.5
		Total	386	7533.9	92.9
		10001	500	7000.5	32.3
311	20	Beech	46	920.6	6.2
011	20	Dogwood	12	157.2	1.6
		Hickory	128	2810.8	15.1
		Spanish Oak	123	2574.9	29.05
		Sweet Gum	33	812.4	18.6
		Virginia Pine	43	140.9	1.2
		White Oak	17	344.0	5.2
		Total	402	7760.8	76.95
311	61	Pin Oak	5	104.8	1.3
311	01	Red Maple	108	1945.9	13.35
		Sweet Gum	2	49.1	0.4
		Total	115	2099.8	15.05
		TOCAT	113	2033.0	13.03
311	62	Pin Oak	171	3541.4	29.85
		Red Maple	36	648.6	3.0
		Sweet Gum	7	173.6	1.4
		Sycamore	i	42.6	0.9
		Total	215	4406.2	35.15
					55,
311	63	Black Cherry	6	78.6	1.1
011	00	Persimmon	ĭ	13.1	0.3
	ŧ	Red Maple	i	19.7	0.15
		Total	8	111.4	1.55
			0	11101	1.00
311	64	Black Cherry	59	773.1	4.6
		Red Maple	147	2650.3	14.05
		Spanish Oak	27	566.7	6.45
		Sweet Gum	15	370.2	6.9
		Tulip Poplar	9	350.5	6.9
		Total	257	4710.8	35.3
		. 0 001	207	1710.0	00.0
311	65	Black Cherry	J	13.1	0.2
		Sweet Gum	20	491.4	10.3
		Tulip Poplar	2	78.6	0.5
		Total	23	583.1	11.0
		10001	23	303.1	11.0

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
311	66	Black Cherry Pin Oak Sweet Gum Total	67 9 2 78	878.0 186.7 49.1 1113.8	7.4 1.5 0.3 9.2
311	67	American Elm Pin Oak Red Maple Sweet Gum Tulip Poplar Total	60 9 89 33 1	1120.4 186.7 1605.2 812.4 39.3	12.4 2.2 12.1 9.25 0.45 36.4
311	68	American Elm Black Cherry Pin Oak Red Maple Sweet Gum Total	3 207 21 237 8 476	55.7 2712.5 435.7 4271.9 196.6 7672.4	0.45 13.1 3.85 23.7 3.0 44.1
311	69	Red Maple Sweet Gum Total	12 3 15	216.2 75.3 291.5	1.0 1.1 2.1
311	70	Black Cherry Sassafras Sweet Gum Total	12 1 136 149	157.2 22.9 3341.5 3521.6	1.3 0.15 46.3 47.75
312	21	American Elm Black Cherry Black Locust Sweet Gum Total	9 113 179 1 302	167.1 1480.7 468.5 26.2 2142.5	2.3 10.85 6.35 0.35
312	22	American Elm Black Cherry Black Locust Total	11 56 132 199	206.4 733.8 347.3	2.0 6.3 5.1
312	23	American Elm Black Locust Total	10 81 91	186.7 212.9 399.6	2.75 2.7 5.45

D	D		Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
312	24	American Elm	4	75.3	0.85
312	24	Tulip Poplar	1	26.2	0.55
		Total	5	101.5	1.35
		Ισται	3	101.3	1.55
312	25	Black Cherry	30	393.1	1.3
0,2	20	Black Locust	19	49.1	1.1
		Tulip Poplar	4	157.2	2.0
		Total	53	599.4	4.4
312	26	American Elm	5	95.0	1.1
		Black Cherry	156	2044.2	19.7
		Red Maple	2	36.0	0.2
		Spanish Oak	44	920.6	14.65
		Sweet Gum	27	665.0	5.75
		Tulip Poplar	48	1870.6	15.95
		White Oak	3	59.0	1.0
		Total	285	5690.4	58.35
07.0	0.7				
312	27	American Elm	1]	206.4	2.8
		Black Locust	8	19.7	0.25
		Sweet Gum	1	26.2	0.6
		White Oak	6	121.2	1.1
		Total	26	373.5	4.75
312	28	American Elm	8	150.7	1.0
312	20	Black Cherry	4	52.4	0.5
		Black Locust	589	1543.0	21.6
		Sweet Gum	19	468.5	4.25
	·	Total	620	2214.6	27.35
		10641	020	2214.0	27.00
312	29	American Elm	59	1100.7	11.6
		Black Cherry	2	26.2	0.15
		Black Locust	25	65.5	0.8
		Total	86	1192.4	12.55
210	20	0	3.7	005 4	3 0
312	30	American Elm	11	206.4	1.9
		Black Locust	32	85.2	1.45
		Chestnut Oak	5 2	108.1	1.2
		Sweet Gum	2	49.1	0.5
		Total	50	448.8	5.05
312	51	Tulip Poplar	1	39.3	0.2
312	31	Sweet Gum	2	49.1	0.15
		Total	3	88.4	0.13
			9		0.0

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
312	52	Sassafras Sweet Gum Total	1 6 7	22.9 147.4 170.3	0.3 1.45 1.75
312	53	Black Cherry Sassafras Sweet Gum Total	7 61 9 77	91.7 1359.5 222.8 1674.0	0.35 9.7 1.85 11.9
312	54	Black Cherry Sweet Gum Total	7 18 25	91.7 442.3 534.0	1.0 5.65 6.65
312	55	Black Cherry Dogwood Persimmon Sassafras Sweet Gum Total	2 1 1 12 49 65	26.2 13.1 13.1 268.6 1205.6	0.2 0.3 0.1 1.3 24.9 26.8
312	56	Black Cherry Sassafras Total	11 1 12	144.1 22.9 167.0	2.2 0.1 2.3
312	57	Sweet Gum	9	222.8	2.65
312	58	Box Elder Persîmmon Sweet Gum Total	11 11 43 65	65.5 147.4 1058.1 1271.0	0.8 1.85 16.5 19.15
312	59	Black Cherry Persimmon Spanish Oak Sweet Gum Total	15 4 20 46 85	196.6 52.4 419.3 1130.2 1798.5	2.3 0.5 7.8 16.3 26.9
312	60	Red Maple Sweet Gum Tulip Poplar Total	44 38 16 98	792.8 933.7 622.4 2348.9	5.3 16.85 3.8 25.95

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
316	1	Black Oak	1	29.5	0.7
310	'	Scarlet Oak	2	65.5	1.2
		Tupelo	2 2	36.0	0.45
		White Oak	10	203.1	3.7
		Total	15	334.1	6.05
316	2	Black Oak	2	59.0	2.15
		White Oak	15	301.4	4.5
		Total	17	360.4	6.65
316	3	Spanish Oak	4	85.2	0.9
		White Oak	19	383.3	4.65
		Total	23	468.5	5.55
316	4	Beech	5 3	101.6	0.45
		Red Maple		55.7	0.4
		Virginia Pine	70	229.3	1.3
		White Oak	5	101.6	1.1
		Total	83	488.2	3.25
316	5	Beech	3	59.0	0.3
		Black Oak	12	347.3	8.8
		Red Maple	6 2 12 3	108.1	1.1
		Sassafras	2	45.9	0.3
		Scarlet Oak	12	399.7	6.4
		Sweet Gum		75.3	0.3
		White Oak	46 84	927.1	17.4
		Total	04	1962.4	34.6
316	6	Black Oak	1	29.5	0.9
		Spanish Oak	2	42.6	0.45
		White Oak	21	422.6	9.4
		Total	24	494.7	10.75
316	7	Beech	5 12	101.6	0.3
		Hickory	12	262.1	1.85
		Red Maple	2	36.0	0.3
		Scarlet Oak		32.8	0.65
		Spanish Oak	3	62.2	0.65
		Tupelo White Oak	2 1 3 2 18	36.0 363.6	0.2 5.55
		Total	43	894.3	9.5
		, o ca i	73	0,74.5	9.0

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
316	8	Red Maple Spanish Oak Virginia Pine White Oak Total	1 1 58 7 67	19.7 19.7 190.0 140.9 370.3	0.3 0.5 1.0 1.65 3.45
316	9	Beech Chestnut Oak Scarlet Oak Spanish Oak Tupelo Virginia Pine White Oak	6 5 2 2 3 74 19	121.2 108.1 65.5 42.6 52.4 242.4 383.3	0.35 1.25 1.15 1.15 0.6 1.15 5.0
316	10	Black Oak White Oak Total	1 34 35	29.5 684.7 714.2	0.55 10.5 11.05
316	41	Black Cherry Sweet Gum Total	24 9 33	314.5 222.8 537.3	2.45 2.25 4.7
316	42	Black Cherry Sweet Gum Tulip Poplar White Oak Total	3 7 2 1	39.3 173.6 78.6 19.7 311.2	0.2 4.25 1.0 0.4 5.85
316	43	Black Cherry Red Maple Sweet Gum Tulip Poplar Total	21 1 8 1 31	275.2 19.7 196.6 39.3 530.8	2.15 0.3 2.25 0.3 5.0
316	44	Black Cherry Persimmon Sweet Gum Tulip Poplar Total	25 5 16 2 48	327.6 68.8 393.1 78.6 868.1	2.8 1.0 5.6 0.6
316	45	Red Maple Scarlet Oak Sweet Gum Tulip Poplar Total	3 2 7 4	55.7 65.5 173.6 157.2 452.0	0.25 0.7 2.5 1.6 5.05

			Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
316	46	Black Cherry Sweet Gum Tulip Poplar Total	5 29 1 35	65.5 714.2 39.3 819.0	0.55 12.1 0.5 13.15
316	47	Black Cherry Dogwood Sweet Gum Total	8 1 30 39	104.8 13.1 737.1 855.0	1.1 0.3 13.7 15.1
316	48	Sweet Gum Tulip Poplar Total	5 14 19	124.5 547.1 671.6	2.9 4.7 7.6
316	49	Black Cherry Sweet Gum Tulip Poplar Total	17 27 1 45	222.8 665.0 39.3 927.1	2.5 9.2 0.5
316	50	Black Cherry Red Maple Sweet Gum Total	5 1 4	65.5 19.7 98.3 183.5	0.35 0.2 2.8 3.35
317	31	Beech Hickory Spanish Oak Virginia Pine Total	3 13 4 25 45	59.0 285.0 85.2 81.9	0.15 1.8 1.1 0.45 3.5
317	32	Beech Hickory Spanish Oak Sweet Gum Tulip Poplar Total	6 15 5 2 2 2	121.2 330.9 104.8 49.1 78.6 684.6	0.55 2.5 1.1 1.0 0.2 5.35
317	33	Beech Hickory Spanish Oak Sweet Gum Total	8 15 9 1 33	160.5 330.9 190.0 26.2 707.6	0.7 3.0 2.05 0.5 6.25

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
317	34	Beech Hickory Spanish Oak Tulip Poplar Virginia Pine White Oak Total	4 8 9 3 31 3	78.6 176.9 190.0 117.9 101.6 59.0	0.25 0.8 2.2 1.2 0.5 0.65
317	35	Beech Chestnut Oak Hickory Spanish Oak Tulip Poplar Total	6 1 7 2 2	121.2 22.9 154.0 42.6 78.6 419.3	0.45 0.2 2.5 0.5 0.6 4.25
317	36	Beech Spanish Oak Tulip Poplar Total	12 17 3 32	239.1 357.1 117.9 714.1	1.1 4.85 0.15 6.1
317	37	Beech Hickory Spanish Oak Total	9 8 6 23	180.2 176.9 124.5 481.6	0.7 1.25 2.05 4.0
317	38	Beech Hickory Spanish Oak Tulip Poplar Total	13 8 5 4 30	258.8 176.9 104.8 157.2 697.7	1.0 3.8 1.5 1.5 7.8
317	39	Beech Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak Total	9 15 5 1 8 4	180.2 330.9 104.8 26.2 311.2 81.9	0.8 1.6 1.6 0.1 1.65 0.9 6.65
317	40	Beech Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak Total	8 18 5 4 2 2 39	160.5 396.4 104.8 98.3 78.6 39.3	1.05 2.6 0.65 1.55 0.2 0.5 6.55

			Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
317	71	Sweet Gum	1	26.2	0.3
317	73	Sweet Gum	]	26.2	0.3
317	74	Red Maple	6	108.1	1.0
317	76	Tulip Poplar	]	39.3	0.2
317	77	Red Maple Spanish Oak Total	6 8 14	108.1 167.1 275.2	0.4 2.6 3.0
317	78	Spanish Oak	2	42.6	0.75
317	79	Red Maple Tulip Poplar	2	36.0 39.3	0.25
		Total	3	75.3	0.45
317	80	Pin Oak Red Maple Sweet Gum	2 1 1	42.6 19.7 26.2	0.4 0.1 0.45
318	11	Total Hickory Red Maple Sweet Gum Tulip Poplar White Oak Total	4 40 7 5 12 25 89	88.5 878.0 127.8 124.5 468.5 504.5 2103.3	0.95 6.0 1.25 1.75 3.0 6.1
318	12	Hickory Red Maple Scarlet Oak Tulip Poplar White Oak Total	34 2 4 7 15	746.9 36.0 134.3 271.9 301.4	4.1 0.2 1.25 2.55 4.0
318	13	Dogwood Hickory Scarlet Oak Sweet Gum Tulip Poplar White Oak Total	5 7 1 1 16 2 32	65.5 154.0 32.8 26.2 622.4 39.3 940.2	0.85 0.7 0.45 0.6 3.6 0.4 6.6

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
318	14	Beech Black Oak Hickory Spanish Oak Sweet Gum Tulip Poplar White Oak	4 3 7 11 3 7 20	78.6 85.2 154.0 229.3 75.3 271.9 402.9	0.45 1.9 0.9 2.85 1.1 1.4 4.7
318	15	Dogwood Hickory Red Maple Spanish Oak Sweet Gum Tulip Poplar Virginia Pine White Oak	8 45 2 20 5 1 28 20	104.8 989.3 36.0 419.3 124.5 39.3 91.7 402.9	0.9 6.1 0.75 5.85 1.6 0.2 0.45 7.25
318	16	Beech Hickory Hornbeam Spanish Oak White Oak Total	2 9 9 8 18 46	39.3 196.6 49.1 167.1 363.6 815.7	0.1 1.25 0.3 2.3 5.6 9.55
318	17	Beech Hickory Spanish Oak Sweet Gum Virginia Pine White Oak Total	2 12 1 3 44 1 63	39.3 262.1 19.7 75.3 144.1 19.7 560.2	0.2 2.6 0.4 1.4 1.05 0.45
318	18	Black Oak Dogwood Hickory Spanish Oak Sweet Gum Total	1 2 6 3 10 22	29.5 26.2 131.0 62.2 245.7 494.6	0.85 0.1 0.85 0.7 5.0 7.5

Day of	Box		Number of	Leaf Surface	Dry
1974	Number	Species	Leaves	Area (cm <sup>2</sup> )	Weight (g)
318	19	Beech Dogwood Spanish Oak Sweet Gum Virginia Pine Total	2 2 1 2 13 20	39.3 26.2 19.7 49.1 42.6	0.3 0.2 0.1 0.85 0.2
318	20	Virginia Pine	45	147.4	1.0
318	61	Scarlet Oak	1	32.8	0.5
318	62	Pin Oak Sweet Gum Total	2 3 5	42.6 75.3 117.9	0.2 0.45 0.65
318	63	Black Cherry	4	52.4	0.2
318	64	Black Cherry Red Maple Spanish Oak Sweet Gum Total	3 1 10 3	39.3 19.7 209.7 75.3 344.0	0.45 0.05 3.0 0.75 4.25
318	65	Sweet Gum	1	26.2	0.35
318	67	American Elm Sweet Gum Total	5 1 6	95.0 26.2 121.2	0.4 0.3 0.7
318	68	Black Cherry Red Maple Sweet Gum Total	3 5 1 9	39.3 91.7 26.2 157.2	0.15 0.7 0.15
318	69	Sweet Gum	2	49.1	0.75
318	70	Black Cherry Sweet Gum Total	4 5 9	52.4 124.5 176.9	0.05 1.85 1.9
319	21	American Elm Black Cherry Total	7 7 14	131.0 91.7 222.7	1.2 0.65 1.85
319	22	American Elm Black Cherry Total	4 5 9	75.3 65.5 140.8	1.3 0.3 1.6

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
319	23	Black Cherry Black Locust Total	2 13 15	26.2 32.8 59.0	0.25 0.35 0.6
319	25	Black Cherry	2	26.2	0.15
319	26	Black Cherry Red Maple Spanish Oak Sweet Gum Total	7 1 4 2	91.7 19.7 85.2 49.1 245.7	0.75 0.3 1.45 0.4 2.9
319	27	American Elm Spanish Oak Sweet Gum Total	3 1 1 5	55.7 19.7 26.2 101.6	0.3 0.2 0.65 1.15
319	28	Black Locust Sweet Gum Total	44 2 46	114.7 49.1 163.8	1.3 1.0 2.3
319	29	American Elm Black Cherry Total	4 3 7	75.3 39.3 114.6	0.3 0.3 0.6
319	30	American Elm Chestnut Oak Sweet Gum Total	2 1 1 4	36.0 22.9 26.2 85.1	1.0 0.2 0.25 1.45
319	52	Dogwood Sweet Gum Total	2 1 3	26.2 26.2 52.4	0.1 0.25 0.35
319	54	Black Cherry Sweet Gum Total	1 1 2	13.1 26.2 39.3	0.1 0.1 0.2
319	55	Persimmon Sassafras Sweet Gum Total	2 1 1 4	26.2 22.9 26.2 75.3	0.1 0.1 0.1 0.3

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (ġ)
319	58	Box Elder Persimmon Sweet Gum Total	6 4 7 17	36.0 52.4 26.2 114.6	0.7 1.1 2.55 4.35
319	59	Spanish Oak Sweet Gum Total	5 1 6	104.8 26.2 131.0	1.7 0.1 1.8
319	60	Red Maple Tulip Poplar Total	2 1 3	36.0 39.3 75.3	0.3 1.0
323	1	Beech Black Oak Scarlet Oak White Oak Total	2 1 1 4	39.3 29.5 32.8 81.9	0.1 0.9 1.0 1.4
323	2	Black Oak Scarlet Oak White Oak Total	2 1 6 9	59.0 32.8 121.2 213.0	1.1 0.3 1.5 2.9
323	3	Spanish Oak Tupelo White Oak Total	3 3 3 9	62.2 52.4 59.0 173.6	0.85 0.1 0.8 1.75
323	4	Red Maple Virginia Pine White Oak Total	1 85 1 87	19.7 278.5 19.7 317.9	0.05 1.4 0.35
323	5	Beech Black Oak Red Maple Sassafras Scarlet Oak Tupelo White Oak Total	4 2 1 1 7 5 18	78.6 59.0 19.7 22.9 232.6 88.4 363.6	0.4 1.25 0.3 0.1 5.0 0.9 5.75

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Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
323	6	Chestnut Oak Scarlet Oak White Oak Total	1 1 9	22.9 32.8 180.2 235.9	0.35 0.45 3.4 4.2
323	7	Sweet Gum White Oak Total	1 5 6	26.2 101.6 127.8	0.3 2.1 2.4
323	8	Chestnut Oak Tupelo Virginia Pine Total	5 5 43 53	108.1 88.4 140.9 337.4	1.5 0.2 0.75 2.45
323	9	Beech Chestnut Oak Tupelo Virginia Pine White Oak Total	3 2 2 61 8 76	59.0 42.6 36.0 199.8 160.5	0.3 0.6 0.2 1.35 1.75
323	10	Beech Black Oak Chestnut Oak Tupelo White Oak Total	1 1 6 4 5	19.7 29.5 131.0 68.8 101.6	0.1 1.1 1.2 0.2 1.0
323	41	Black Cherry Sweet Gum Total	5 15 20	65.5 370.2 435.7	0.4 6.35 6.75
323	42	Red Maple Sweet Gum Tulip Poplar Total	1 4 3	19.7 98.3 117.9 235.9	0.2 0.75 0.8 1.75
323	43	Black Cherry Sweet Gum	7 5 12	91.7 124.5 216.2	0.6 1.3
323	44	Black Cherry Persimmon Sweet Gum Total	13 7 7 27	170.3 95.0 173.6 438.9	2.4 0.85 3.9 7.15

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm2)	Dry Weight (g)
323	45	Black Cherry Sweet Gum Tulip Poplar	2 2 2	26.2 49.1 78.6	0.1 0.4 0.3
323	46	Total Sweet Gum Tulip Poplar	6 8 1. 9	153.9 196.7 39.3	0.8 1.75 0.2
323	47	Total Sweet Gum	3	236.0 75.3	1.95 1.0
323	48	Persimmon Sweet Gum Tulip Poplar Total	1 2 1 4	13.1 49.1 39.3 101.5	0.8 0.4 0.55
323	49	Black Cherry Sweet Gum Total	3 7 10	39.3 173.6 212.9	0.4 3.9 4.3
323	50	Sweet Gum	3	75.3	1.15
324	31	Virginia Pine	17	55.7	0.3
324	32	Beech Hickory Scarlet Oak Spanish Oak White Oak Total	6 6 1 1 2	121.2 131.0 32.8 19.7 39.3	0.85 1.15 0.6 0.35 0.75
324	33	Beech Spanish Oak Total	2 3 5	39.3 62.2 101.5	0.1 0.8 0.9
324	34	Beech Hickory Virginia Pine Total	2 15 49 66	39.3 330.9 160.5 530.7	0.15 2.2 0.8 3.15
324	35	Beech Sweet Gum Total	3 1 4	59.0 26.2 85.2	0.3 0.5 0.8
324	36	Beech	4	78.6	0.2

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
324	37	Beech Hickory Total	3 7 10	59.0 154.0 213.0	0.4 1.2 1.6
324	38	Beech Black Oak Hickory Total	6 1 4	121.2 29.5 88.4 239.1	0.55 1.9 0.9 3.3
324	39	Beech Hickory Spanish Oak Virginia Pine Total	3 18 1 40 62	59.0 396.4 19.7 131.0 606.1	0.3 4.0 0.2 0.7 5.2
324	40	Beech Hickory Total	6 6 12	121.2 131.0 252.2	0.4 3.0 3.4
324	76	Spanish Oak	11	19.7	•••
324	77	Spanish Oak Tupelo White Oak Total	4 3 1 8	85.2 52.4 19.7	1.6 0.5 0.4 2.5
324	79	American Elm	3	55.7	0.3
324	80	Scarlet Oak	11	_	0.3
325	11	Hickory Red Maple Scarlet Oak Tulip Poplar White Oak Total	19 2 1 4 2	416.0 36.0 32.8 78.6 39.3 602.7	3.5 0.2 1.0 0.8 0.8
325	12	Beech Black Oak Dogwood Hickory Scarlet Oak Sweet Gum Tulip Poplar White Oak	1 2 1 9 1 2 5 5	19.7 59.0 13.1 196.6 32.8 49.1 196.6 101.6	0.1 2.0 0.2 1.7 0.7 0.4 1.5 1.7

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
325	13	Beech Dogwood Hickory Spanish Oak Sweet Gum Tulip Poplar Red Maple White Oak	2 3 5 2 1 5 2 2 2	39.3 39.3 111.4 42.6 26.2 196.6 36.0 39.3	0.2 0.5 0.8 0.5 0.4 1.1 0.3 0.5
325	14	Beech Dogwood Hickory Spanish Oak White Oak Total	3 1 5 3 8 20	59.0 13.1 111.4 62.2 160.5 406.2	0.2 0.2 0.3 0.8 1.7
325	15	Dogwood Hickory Red Maple Spanish Oak Total	2 13 1 6 22	26.2 285.0 19.7 124.5 455.4	0.4 5.6 0.2 2.1 8.3
325	16	Hickory Scarlet Oak Spanish Oak Virginia Pine Total	9 1 1 29 40	196.6 32.6 19.7 95.0 343.9	1.4 0.4 0.4 0.5 2.7
325		Beech Black Cherry Spanish Oak Sweet Gum White Oak Total	4 5 1 2 1	78.6 65.5 19.7 49.1 19.7 232.6	0.5 0.3 0.3 2.0 0.3 3.4
325	18	Black Oak Spanish Oak Total	2 1 3	59.0 19.7 <b>7</b> 8.7	1.6 0.2 1.8
325	19	Spanish Oak Tulip Poplar Total	1 1 2	19.7 39.3 59.0	0.2 0.1 0.3

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
225	20	Panch	1	19.7	0.2
325	20	Beech Sweet Gum	4	98.3	2.6
		Virginia Pine	36	117.9	0.8
		Total	41	235.9	3.6
325	61	Red Maple	2	36.0	0.2
325	62	Pin Oak	6	124.5	0.9
020	02	Red Maple	5	91.7	0.7
		Total	11	216.2	1.6
325	64	Red Maple	2	36.0	0.4
		Spanish Oak	2 5 2	104.8	1.4
		Sweet Gum	2	49.1	1.6
		Total	9	189.9	3.4
325	65	Red Maple	1	19.7	0.1
325	67	Pin Oak	1	19.7	0.5
		Red Maple	5	91.7	1.3
		Sweet Gum	2	49.1	0.4
		Total	8	160.5	2.2
325	68	Black Cherry	6	78.6	0.5
		Red Maple	3	55.7	0.3
		Total	9	134.3	0.8
325	69	Black Cherry	1	13.1	0.1
325	70	Sweet Gum	6	147.4	1.5
	0-				
326	21	Black Cherry	19	49.1	1.8
		Black Locust	18 37	45.9	0.45
		Total	3/	95.0	2.25
326	22	American Elm	3	55.7	0.45
		Black Cherry	3 4	52.4	0.2
		Black Locust	13	32.8	0.5
		Total	20	140.9	1.15
326	23	Black Cherry	13	170.3	1.85
		Black Locust	13	32.8	0.25
		Total	26	203.1	2.1

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
326	24	American Elm	4	75.3	0.4
326	25	American Elm	2	32.8	0.7
326	26	American Elm Black Cherry Spanish Oak Sweet Gum Total	2 16 3 6 27	36.0 209.7 62.2 147.4 455.3	0.1 1.65 1.4 3.5 6.65
326	27	American Elm Black Cherry Total	5 4 9	95.0 52.4 147.4	0.55 0.35 0.9
326	28	American Elm Black Locust Total	2 22 24	36.0 59.0 95.0	0.35 0.6 0.95
326	29	American Elm	1	19.7	0.1
326	30	American Elm Sweet Gum Total	5 1 6	95.0 26.2 121.2	1.2 0.2 1.4
326	52	Pin Oak	2	42.6	0.7
326	53	Black Cherry	5	68.8	0.45
326	55	Sassafras	1	22.9	0.02
326	56	Black Cherry	1	9.8	0.2
326	57	Sweet Gum	2	49.1	1.0
326	58	Black Cherry Persimmon Sweet Gum Virginia Pine Total	3 4 5 25 37	39.3 52.4 121.2 81.9 294.8	0.25 0.75 2.75 0.55 4.3
326	59	Sweet Gum	2	52.4	0.95

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
326	60	Red Maple Tulip Poplar Total	4 2 6	78.6 75.3 153.9	0.65 0.5 1.15
330	1	Beech Black Oak Red Maple White Oak Total	13 2 3 4 22	258.8 59.0 59.0 81.9 458.7	1.4 1.45 0.55 1.75 5.15
330	2	Black Oak Scarlet Oak White Oak Total	1 1 7 9	32.8 140.9 173.7	0.35 1.0 2.45 3.8
330	3	Black Cherry Spanish Oak White Oak Total	2 1 5	26.2 19.7 101.6 147.5	0.1 0.4 0.65 1.15
330	4	Beech Black Oak Red Maple Spanish Oak Tupelo	8 2 4 1 2	157.2 59.0 72.1 22.9 36.0	1.15 1.45 1.2 0.4 0.35
THE RESIDENCE OF THE PROPERTY		White Oak Total	6 23	121.2 468.4	1.55 6.1
330	5	Black Oak Red Maple Scarlet Oak Tupelo White Oak Total	6 2 10 2 23 43	176.9 39.3 334.1 36.0 465.2	6.3 0.6 4.5 0.4 8.55 20.35
330	6	Chestnut Oak Scarlet Oak White Oak Total	3 2 8 13	52.4 65.5 160.5 278.4	2.0 0.4 2.55 4.95
330		Beech Spanish Oak White Oak Total	2 1 9	39.3 22.9 180.2 242.4	0.2 0.15 2.45

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
		Curatas			
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
			_		
330	8	Chestnut Oak	1	16.4	0.4
		Spanish Oak	1	19.7	0.15
		White Oak	. 2	39.3	0.7
	<del></del>		4	75.4	1.25
		Total	4	75.4	1.25
220	0	Doorle	4	70.6	0.45
330	9	Beech	4	78.6	0.45
		Chestnut Oak	2	42.6	0.6
		Virginia Pine	50	163.8	0.75
		White Oak	6	121.2	2.3
		Total	62	406.2	4.1
		Ισται	02	400.2	4.1
330	10	Black Oak	2	88.4	1.2
330	10		3		
		Chestnut Oak	3	65.5	1.0
		Tupelo	2	36.0	0.45
		White Oak	3 3 2 1	19.7	0.3
		Total	9	209.6	2.95
		10001		200 % 0	2.50
330	41	Black Cherry	8	104.8	0.7
000			8 2	26.2	0.3
		Dogwood			
		Sweet Gum	11	271.9	5.65
		Total	21	402.9	6.65
330	42	Sweet Gum	3	75.3	2.15
		Tulip Poplar	1	39.3	0.15
	· <del></del>	Total	4	114.6	2.3
		10001	•	11110	2.0
330	43	Black Cherry	4	85.2	0.6
330	43		7		
		Sweet Gum	2	45.9	1.6
		Total	6	131.1	2.2
000				0.10	
330	44	Black Cherry	19	249.0	2.0
		Persimmon	9	121.2	0.9
		Sweet Gum	37	255.5	12.9
		Tulip Poplar	1	36.0	0.45
		Total	66	661.7	16.25
330	45	Diack Chamar	Λ	E2 /	0.4
330	45	Black Cherry	4	52.4	0.4
		Sweet Gum	6	147.4	1.0
		Total	10	199.8	1.0
000					
330	46	Sweet Gum	16	393.1	7.1
		Tulip Poplar	1	32.8	0.35
		Total	17	425.9	7.45
		10001	- 17	760.5	7.75

CONTRACTOR LANGUAGE TO SERVICE STATE OF THE SERVICE STATE STATE OF THE SERVICE STATE	ngo ang pangang pangan alimang sampan and basan an		water the same of		
			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	<u>Leaves</u>	(cm²)	(g)
330	47	Black Cherry	7	91.7	1.0
330	11/	Sweet Gum	19	468.5	7.85
		Total	26	560.2	8.85
		10 ca i	<u> </u>		0.00
330	48	Sweet Gum	5	124.5	2.0
		Tulip Poplar	6	157.2	1.5
		Total	11	281.7	3.5
330	49	Black Cherry	7	91.7	0.75
333		Sweet Gum	18	442.3	4.75
Where the promotion community are some and the community and the	i tary garanti yaya isamandi ayandi ili tarya inci ili galaki wanibi wali ili mu	Total	25	534.0	5.5
330	50	Black Cherry	3 2 2	39.3	0.35
		Red Maple	2	36.0	0.15
CONTRACTOR PROGRAMMENT CONTRACTOR	graphy structured in the production of the period of the p	Sweet Gum	2	49.1	1.0
		Total	7	124.4	1.5
331	31	Beech	17	340.7	1.9
331	32	Beech	6	117.9	0.6
221	V &	Spanish Oak	2	42.6	0.6
		Sweet Gum	6 2 5	124.5	2.3
		White Oak	4	81.9	2.8
CAMPACATA AND COLUMN STREET, ST.		Total	17	366.9	6.3
003	00	n .	***	140.0	0.5
331	33	Beech	7	140.9	0.5
		Hickory	7	154.0	2.8
		Spanish Oak	7 21	147.4 442.3	1.9
		Total	41	442.3	5.2
331	34	Beech	1	16.4	0.2
		Spanish Oak	2	42.6	0.8
		Virginia Pine	46	150.7	0.8
With the content of account of the latest and the	уудаалагды ж <del>оол тоо обоос</del> онд өөгөөрө хөрөлөү каларын оолоо олоодого	Total	49	209.7	1.8
331	35	Beech	39	779.7	4.7
991	33	Hickory	5	111.4	0.5
		Sweet Gum	ĭ	26.2	0.7
4944 Maran paraglish glamplayan (Amar) amalar		Total	45	917.3	5.9
221	36	Paach	7	140-0	0.7
331	30	Beech	7	140.9	0.7
		Spanish Oak	]	19.7	0.3
		Sweet Gum	5 1	124.5	0.8
***************************************		Tulip Poplar		39.3	0.2
		Total	14	324.4	2.0

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
331	37	Beech Spanish Oak Total	8 2 10	160.5 39.3 199.8	0.9 0.4 1.3
331	38	Beech Black Oak Hickory Spanish Oak	55 3 11 7	1081.1 88.4 216.2 147.4	6.2 2.5 3.6 2.7
	· · · · · · · · · · · · · · · · · · ·	Total	76	1533.1	15.0
331	39	Beech Hickory Total	10 8 18	196.6 176.9 373.5	0.7 1.6 2.3
331	40	Beech Hickory Sweet Gum Tulip Poplar White Oak Total	13 9 1 1 1 25	255.5 196.6 22.9 32.8 19.7 527.5	1.0 1.9 0.3 0.6 0.3
331	75	Black Cherry Red Maple Total	2 1 3	26.2 16.4 42.6	0.2 0.1 0.3
331	77	Black Cherry Spanish Oak Sweet Gum Total	3 1 4 8	39.3 19.7 104.8 163.8	0.3 0.3 1.7 2.3
331	78	Black Cherry Red Maple Total	2 2 4	26.2 36.0 62.2	0.2 0.3 0.5
331	80	Pin Oak White Oak Total	2 1 3	42.6 19.7 62.3	0.4 0.4 0.8
332	11	Black Cherry Black Oak Red Maple Sweet Gum White Oak Total	2 1 3 1 2	26.2 29.5 55.7 22.9 39.3	0.2 0.2 0.3 0.2 0.7

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
332	12	Tulip Poplar	2	78.6	0.6
332	13	Black Cherry Dogwood Tulip Poplar White Oak Total	2 2 1 2 7	26.2 26.2 32.8 39.3	0.1 0.4 0.6 0.2
332	14	Black Oak Dogwood Hickory Spanish Oak White Oak Total	3 3 4 22 35	85.2 39.3 65.5 78.6 445.5 714.1	2.8 0.5 0.6 1.9 4.9
332	15	Beech Dogwood Hickory Spanish Oak White Oak Total	1 3 3 4 3	19.7 39.3 65.5 85.2 59.0	0.3 0.3 0.8 2.2 1.0
332	16	Beech Black Oak Dogwood Hickory Spanish Oak Sweet Gum White Oak	12 9 3 6 2 3 8	239.1 258.8 39.3 131.0 39.3 75.3 160.5	1.8 6.6 0.2 2.0 1.0 0.4 3.1
332	17	Beech Black Oak Dogwood Spanish Oak Sweet Gum White Oak Total	28 10 5 2 7 3 55	560.2 288.3 65.5 42.6 170.3 59.0	3.9 5.5 0.5 0.6 1.0 1.4
332	18	Sweet Gum	4	98.3	0.6

Day of	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
332	19	Beech Dogwood Spanish Oak Sweet Gum White Oak	2 4 2 1 7	39.3 52.4 42.6 16.4 140.9	0.3 0.4 0.4 0.6 2.2 3.9
332	20	Total Beech Spanish Oak Total	16 3 2 5	291.6 59.0 36.0 95.0	3.9 0.4 0.3 0.7
332	62	Pin Oak	2	42.6	0.5
332	63	Black Cherry	1	13.1	0.2
332	64	Red Maple Spanish Oak Sweet Gum Total	2 2 2 6	36.0 42.6 45.9 124.5	0.4 0.5 0.7 1.6
332	65	Persimmon	]	13.1	0.1
332	66	Pin Oak		19.7	0.3
332	67	Pin Oak Red Maple Total	1 1 2	19.7 19.7 39.4	0.4 0.4 0.8
332	68	Black Cherry Red Maple Total	8 1 9	104.8 19.7 124.5	0.7 1.2 1.9
332	70	Black Cherry Sweet Gum Sycamore Total	1 1 1 3	13.1 26.2 42.6 81.9	0.2 0.3 0.8
333	21	Black Cherry	21	275.2	2.4
333	22	American Elm Black Cherry Total	1 3 4	16.4 36.0 52.4	0.2 0.4 0.6
333	23	Black Cherry	8	78.6	1.5

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
333	24	Black Cherry	3	39.3	0.1
333	26	Black Cherry Sweet Gum Total	13 2 15	170.3 49.1 219.4	2.5 0.8 3.3
333	28	Black Cherry	1	13.1	0.2
333	30	American Elm	1	19.7	0.1
333	51	Black Cherry	1	13.1	0.4
333	56	Black Cherry	2	26.2	0.5
333	59	Sweet Gum	1	26.2	0.5
337	1	Persimmon White Oak Total	2 5 7	29.5 101.6 131.1	0.1 1.4 1.5
337	2	Persimmon Sassafras Spanish Oak Sweet Gum White Oak Total	2 1 3 2 8	26.2 22.9 62.2 52.4 160.5 324.2	0.1 0.9 0.1 2.1
337	3	Black Cherry Persimmon Sassafras Spanish Oak Sweet Gum White Oak Total	1 2 4 7 3 15	13.1 26.2 88.4 147.4 75.3 301.4	0.1 0.2 - 1.9 1.1 5.4 8.7
337	4	Beech White Oak Total	1 3 4	19.7 59.0 78.7	0.1 1.0 1.1
337	5	Tupelo White Oak Total	2 4 6	36.0 78.6 114.6	0.1 0.9 1.0

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
337	6	Beech Chestnut Oak Red Maple Sassafras White Oak Total	2 2 1 1 9	39.3 42.6 26.2 22.9 180.2	0.2 1.2 0.3 0.4 2.3
337	7	Beech Black Oak Dogwood Hickory Persimmon Red Maple Red Oak Sassafras Scarlet Oak Sweet Gum Tupelo White Oak	7 20 - 8 1 2 - - 6 3 6 36	140.9 575.5 - 176.9 13.1 39.3 - 199.8 75.3 104.8 727.3 2052.9	0.7 13.6 0.3 2.2 0.1 0.3 3.5 0.3 - 0.9 1.3 11.0
337	8	Chestnut Oak Persimmon Spanish Oak Virginia Pine White Oak Total	2 2 1 27 - 32	42.6 26.2 19.7 88.4 19.7	0.9 0.1 0.4 0.5 0.6 2.5
337	9	Beech Virginia Pine White Oak Total	1 3 3 7	19.7 9.8 59.0 88.5	0.1 0.1 0.6 0.8
337	10	Beech Chestnut Oak Virginia Pine White Oak Total	1 2 12 4	19.7 42.6 39.3 81.9	0.1 0.2 0.1 0.9
337	41	Box Elder Sweet Gum Total	7 7 14	42.6 170.3 212.9	1.2 4.3 5.5

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
337	42	Black Cherry Sweet Gum Total	2 7 9	22.9 173.6 196.5	0.2 1.9 2.1
337	43	Black Cherry Red Maple Spanish Oak Sweet Gum Tupelo Total	1 1 1 8 1	13.1 19.7 19.7 196.6 16.4 265.5	0.2 0.1 0.1 2.7 0.1 3.2
337	44	Black Cherry Spanish Oak Sweet Gum Tulip Poplar Total	7 1 16 2 26	91.7 19.7 393.1 65.5 570.0	1.3 0.2 5.6 1.0
337	45	Sweet Gum Tulip Poplar Total	4 2 6	98.3 75.3 173.6	1.2 1.2 2.4
337	46	Scarlet Oak Sweet Gum Total	1 8 9	32.8 196.6 229.4	0.1 2.8 2.9
337	47	Black Cherry Sweet Gum Total	3 16 19	39.3 393.1 432.4	0.4 6.8 7.2
337	48	Black Cherry Sweet Gum Total	1 1 2	13.1 22.9 36.0	0.2 0.1 0.3
337	49	Sweet Gum	25	615.9	5.7
338	31	Beech Spanish Oak Total	2 3 5	39.3 62.2 101.5	0.3 0.7 1.0
338	. 32	Beech Scarlet Oak Total	4 1 5	78.6 32.8 111.4	0.4 0.4 0.8

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm²)	Dry Weight (g)
338	33	Beech Spanish Oak Tulip Poplar Total	4 1 1 6	78.6 19.7 32.8 131.1	0.4 0.4 0.5 1.3
338	34	Beech Spanish Oak White Oak Total	7 2 2 11	140.9 42.6 39.3 222.8	0.8 0.4 0.4 1.6
338	35	Beech Spanish Oak Tulip Poplar White Oak Total	9 2 1 2	180.2 42.6 32.8 39.3 294.9	0.8 0.6 0.3 0.7
338	36	Beech Spanish Oak Tulip Poplar Virginia Pine Total	3 1 1 19	59.0 19.7 39.3 62.2	0.3 0.2 0.3 0.2
338	37	Beech Hickory Total	5 5 10	98.3 111.4 209.7	0.4 0.7 1.1
338	38	Beech Spanish Oak Tulip Poplar Total	16 1 1 1	321.0 19.7 39.3 380.0	2.0 0.4 0.2 2.6
338	39	Beech Spanish Oak Tulip Poplar Total	5 1 2 8	101.6 19.7 78.6 199.9	0.5 0.5 0.9
338	40	Beech Black Oak Sweet Gum White Oak Total	10 1 1 1	199.8 29.5 26.2 19.7 275.2	1.2 0.9 0.4 0.6 3.1
338	71	Spanish Oak Tulip Poplar Total	1 1 2	16.4 29.5 45.9	0.5 0.3 0.8

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
OF A STATE OF THE PROPERTY OF	× 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	эрсетсэ			
338	72	Sweet Gum	1	16.4	0.5
338	73	Sweet Gum	1	26.2	0.2
338	74	Red Maple	3	59.0	0.6
338	77	Black Cherry	1	6.5	0.2
		Spanish Oak Total	2	39.3 45.8	0.4
338	78	Tulip Poplar	2	32.8	0.4
338	80	Pîn Oak	1	19.7	0.4
339	11	Beech Dogwood Hickory	1 1 5	19.7 13.1 111.4	0.2 0.2 0.7
		Sweet Gum White Oak Total	5 2 5 14	49.1 101.6 294.9	0.9 1.1 3.1
339	12	American Elm	1	19.7	0.1
		Dogwood Scarlet Oak Tulip Poplar White Oak	5 8 3 9	65.5 314.5 65.5 180.2	0.3 44.4 1.2 1.4
******		Total	26	645.4	47.4
339	13	Beech Black Oak Hickory Sweet Gum Tulip Poplar White Oak	4 50 13 1 3	78.6 1474.2 285.0 26.6 98.3 22.9	0.6 39.9 3.4 0.4 1.2 0.3
	7 ( 10 ( 10 )	Total	72	1985.6	45.8
339	14	Black Oak Scarlet Oak Spanish Oak Sweet Gum Tupelo	3 2 2 1 1	78.6 62.2 39.3 19.7 16.4	2.3 0.8 0.7 0.1 0.2
		White Oak Total	7 16	140.9 357.1	0.2 2.2 6.3

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
339	15	Beech	4	78.6	0.5
		Hickory	7	153.9	1.2
		Red Maple	1	19.7	0.4
		Spanish Oak	8	235.9	3.7
		Sweet Gum	1	22.9	0.5
		Virginia Pine	9	29.5	0.1
-	<del></del>	White Oak		39.3	1.6
		Total	32	579.8	8.0
339	16	Beech	4	78.6	0.6
		Black Oak	5	147.4	4.7
		Virginia Pine	7	22.9	0.1
	<del></del>	Total	16	248.9	5.4
339	17	Beech	5	98.3	0.7
003	.,	Black Oak	5 3 1	88.5	3.7
		Red Maple	ĭ	19.7	0.2
		Sweet Cherry	15	196.6	1.1
		Sweet Gum	4	98.3	1.3
		Virginia Pine	48	157.2	0.6
		White Oak	1	19.7	1.0
		Total	77	678.3	8.6
339	18	Dogwood	3	39.3	0.4
		Sassafras	3 1	22.9	0.2
		Spanish Oak	7	144.1	2.3
		Sweet Gum	6	157.2	1.3
		Virginia Pine	80	262.1	3.0
		Total	97	625.6	7.2
339	19	Black Oak	4	104.8	5.0
		Chestnut	i	19.7	0.8
		Dogwood	ĺ	13.1	0.3
		Sweet Gum	3	78.6	0.8
		Virginia Pine	81	265.4	1.6
		Total	90	481.6	8.5
339	20	Black Oak	1	29.5	0.4
005		Sweet Gum	2	45.9	0.4
		Virginia Pine	23	75.3	0.1
	4	Total	26	150.7	0.9

Forest Ecology Litter Box Data - 1974

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
339	61	Red Maple	2	36.0	0.4
339	62	Pin Oak Sycamore Total	1 1 2	19.7 42.6 62.3	0.3 0.4 0.7
339	63	Sweet Gum	2	49.1	0.6
339	64	Black Cherry Red Maple Total	2 2 4	26.2 36.0 62.2	0.4 0.3 0.7
339	67	Red Maple	2	36.0	0.3
339	69	Black Cherry Red Maple Total	3 3 6	39.3 55.7 95.0	0.3 0.4 0.7
339	70	Black Cherry	1	13.1	0.2
340	21	Black Cherry	6	78.6	0.9
340	22	Black Cherry	11	144.1	1.4
340	25	Black Cherry	5	65.5	0.2
340	26	Black Cherry Sweet Gum Tulip Poplar Total	2 1 4 7	26.2 26.2 157.2 209.6	0.2 0.5 0.9
340	29	American Elm	3	55.7	0.6
340	30	American Elm	4	75.3	1.2
340	55	Persimmon Sweet Gum Total	4 2 6	52.4 49.1 101.5	0.3 0.4 0.7
340	58	Persimmon Sweet Gum Total	14 14 28	186.7 344.0 530.7	1.9 8.3 10.2

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Nümber	Species	Leaves	(cm <sup>2</sup> )	(ġ)
340	59	Sassafras	2 2	45.9	0.5
		Spanish Oak	2	42.6	0.5
		Sweet Gum Total	<u> </u>	26.2 114.7	0.2
			Ů		
340	60	Red Maple	]	19.7	0.2
		Spanish Oak Sweet Gum	l T	19.7 26.2	0.5 0.5
		Tulip Poplar	i	32.8	0.4
		Total	4	98.4	1.6
344	1	Beech	5	101.6	0.4
344	'	Spanish Oak	ī	19.7	0.5
		White Oak	6	121.2	1.7
		Total	12	242.5	2.6
344	2	White Oak	2	39.3	0.9
344	4	Beech	3	59.0	0.4
		Scarlet Oak	1	32.8	0.8
		Total	4	91.8	1.2
344	5	Scarlet Oak	. 1	29.5	0.4
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		White Oak	3	59.0	1.7
		Total	4	88.5	2.1
344	6	Chestnut Oak	1	22.9	0.4
344	. 8	White Oak	2	39.3	0.6
344	9	White Oak	3	59.0	1.0
344	10	White Oak	4	81.9	0.9
344	41	Sweet Gum	14	344.0	5,8
344	42	Sweet Gum	1	16.4	0.3
		Tulip Poplar	1	19.7	0.2
The state of the s		Total	2	36.1	0.5
344	50	Pin Oak	1	16.4	0.2
	- No O No No.	Sweet Gum	4	98.3	1.1
		Total	5	114.7	1.3

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
344	79	Red Maple	1	19.7	0.3
345	31	Beech	1	19.7	0.2
345	35	Beech	2	29.5	0.3
345	37	Beech	1	13.1	0.2
345	38	Beech Spanish Oak Total	4 2 6	68.8 29.5 98.3	0.6 0.5 1.1
345	39	Beech Black Oak Spanish Oak Total	1 1 1 3	13.1 32.8 19.7 65.6	0.1 1.3 0.3
345	40	Beech	1	19.7	0.2
346	14	Spanish Oak	2	36.0	0.6
346	15	Dogwood	1	16.4	0.2
346	16	Black Oak	2	69.0	3.1
346	68	Spanish Oak	1	19.7	0.5
346	70	Black Cherry	1	9.8	0.2
351	1	White Oak	3	39.3	0.6
351	3	White Oak	3	45.9	0.4
351	4	Beech White Oak Total	_1 1	29.5 52.4 81.9	0.3 0.9 1.2
351	5	White Oak	n=	22.9	0.3
351	6	Red Maple	1	19.7	0.2
351	7	American Holly Virginia Pine Total	1 5 6	13.1 6.6 19.7	0.2 0.2 0.4

			Number	Leaf Surface	Dry
Day of 1974	Box Number	Species	of Leaves	Area (cm <sup>2</sup> )	Weight (g)
351	9	Red Maple Virginia Pine White Oak	1 13 2	6.6 13.1 19.7	0.3 0.3 0.6
		Total	16	39.4	
351	11	Tulip Poplar		45.9	0.3
351	12	White Oak	1	19.7	0.2
351	13	Beech	-	26.2	0.1
351	15	Sassafras	-	72.1	0.5
351	17	Virginia Pine	3	3.3	0.1
351	21	American Elm Hornbeam Total	1 2 3	3.3 36.0 39.3	0.2 0.3 0.5
351	23	American Elm Beech Total	1 1 2	13.1 39.3 52.4	0.2 0.3 0.5
351	26	Spanish Oak	]	19.7	0.3
351	28	American Elm	1	19.7	0.3
351	32	Beech	19	183.5	5.1
351	35	Beech	1	32.8	0.1
351	37	Spanish Oak	1	19.7	0.2
351	39	Spanish Oak	_	29.5	0.4
351	49	Black Oak Sweet Gum Total	1 1 2	3.3 6.6 9.9	0.1 0.1 0.2
351	68	Black Cherry		6.6	0.1
358	1	Beech Tupelo White Oak Total	2 1 1 4	26.2 19.7 19.7 65.6	0.2 0.2 0.2 0.6

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
358	2	Tupelo White Oak Total	1 2 3	26.2 45.9 72.1	0.2 0.8 1.0
358	4	Beech Black Oak Red Maple Spanish Oak Virginia Pine White Oak Total	2 1 2 1 9 1	26.2 59.0 26.2 19.7 6.6 26.2	0.2 1.4 0.2 0.3 0.2 0.4
358	6	Virginia Pine White Oak Total	2 1 3	32.8 32.8	0.4
358	8	Red Maple White Oak Total	2 1 3	32.8 32.8 65.6	0.3 0.6 0.9
358	9	Virginia Pine	16	6.6	0.3
358	10	Virginia Pine	4	3.3	0.1
358	14	White Oak	1	26.2	0.2
358	16	Beech Hornbeam Total	2 1 3	52.4 6.6 59.0	0.4 0.0 0.4
358	17	Beech Spanish Oak Tulip Poplar Virginia Pine Total	1 1 1 9	39.3 26.2 26.2 6.6 98.3	0.3 0.5 0.5 0.2 1.5
358	18	American Holly	]	3.1	0.2
358	19	Virginia Pine	5	6.6	0.1
358	20	Beech Chestnut Oak Virginia Pine Total	1 1 26 28	26.2 72.1 13.1 111.4	0.2 0.9 0.5

Day of	Box		Number of	Leaf Surface Area	Dry Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
358	31	Virginia Pine	4	3.3	0.1
358	32	Beech	. 1	13.1	-
		Hornbeam	1	6.6	0.1
· · · · · · · · · · · · · · · · · · ·		Virginia Pine Total	6 8	6.6	0.1
		Ισιαι	0	20.3	0.2
358	33	Virginia Pine	10	6.6	0.1
358	34	Tulip Poplar		19.7	0.2
330	34	Virginia Pine	36	19.7	0.4
		Total	36	39.4	0.4
358	35	Beech	ì	26.2	0.1
***************************************					
358	36	Beech	2	26.2	0.1
358	38	Beech	-	32.8	0.3
1		White Oak		32.2	0.3
		Total	-	65.0	0.6
358	39	Beech	]	26.2	0.1
358	40	Beech	1	_	0.1
		Spanish Oak	1	19.7	0.2
		Total	2	19.7	0.3
358	56	Virginia Pine	42	19.7	0.7
000	60		2		
358	60	Loblolly Pine Virginia Pine	1 6	3.3	0.1
		Total .	7	3.3	0.3
250	C 4		,		
358	64	Spanish Oak		26.2	0.3
358	67	Black Cherry	<u> </u>	6.6	0.1
358	68	Black Cherry	2	6.6	0.1
358	70	Sweet Gum	1	19.7	0.2
358	74	Oak	1	6.6	0.1
358	75	Pin Oak	1	-	0.01

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
365		Beech Black Cherry Black Oak Tupelo Red Maple White Oak	11 - 1 4 6 3 25	190.0 13.2 150.7 39.3 91.7 137.6	1.0 0.1 1.8 0.4 0.7 1.9
365	3	June Berry Scarlet Oak Spanish Oak Total	1 1 1 3	9.8 13.1 26.2 49.1	0.01 0.1 0.3 0.41
365	4	Beech Tupelo Virginia Pine White Oak Total	5 2 3 3	29.0 39.3 - 65.5 133.8	0.5 0.4 0.01 0.8 1.7
365	5	Beech Black Oak Red Maple Total	3 2 1 6	78.6 85.2 32.8 196.6	0.6 1.1 0.2 1.9
365	6	Chestnut Oak White Oak Total	4 2 6	314.5 72.1 386.6	2.5 0.9 3.4
365	7	Scarlet Oak White Oak Total	1 1 2	19.7 13.1 32.8	0.2 0.1 0.3
365	8	Scarlet Oak White Oak Total	2 2 4	52.4 26.2 78.6	0.9 0.2 1.1
365	9	Beech Red Maple White Oak Total	1 1 3	26.2 39.3 45.9	0.2 0.2 0.6
365	10	Black Oak	· · · · · ]	59.0	0.7
365	11	Red Maple	1	6.6	0.1

			Number	Leaf Surface	Dry
Day of	Box		of	Area	Weight
1974	Number	Species	Leaves	(cm <sup>2</sup> )	(g)
365	12	Hickory	6	45.9	1.0
365	13	Beech	. 1	13.1	_
365	14	White Oak	11	13.2	0.1
365	15	Beech	5 6 1	104.8	0.7
		Hickory	6	163.8	2.0
		Red Maple		32.8	0.3
		Spanish Oak	]	65.5	0.8
		Tulip Poplar	18	45.9	0.5
		White Oak	3	104.8	1.4
		Total	34	517.6	5.7
365	16	Beech	וו	275.2	1.5
	, •	Black Oak	8	524.6	7.1
		Hickory	ĭ	26.3	0.1
		Spanish Oak	i	39.3	0.4
		White Oak	5	104.8	1.2
		Total	26	970.2	10.3
365	17	Beech	2	59.0	0.3
	••	Virginia Pine	18	6.6	0.5
		Total	20	65.6	0.8
365	18	Beech	ı	32.8	0.2
		Black Oak	1 2 2	111.4	1.1
		Hickory	2	6.6	0.2
		Virginia Pine	12	3.3	0.2
		White Oak	ī	32.8	0.2
		Total ,	18	186.9	1.9
365	19	Spanish Oak	1	19.7	0.3
365	20	Beech	2	19.7	0.2
365	26	Tulip Poplar	1	19.7	0.2
.365	31	Beech	2	45.9	0.2
		Hickory	2 1	13.1	· -
	2-34 - 2-444-44 - 24 - 144	Total	3	59.0	0.2
365	32	Beech	3	91.7	0.3

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (g)
365	33	Beech	2	45.9	0.2
365	34	Beech	3	72.1	0.2
365	35	Beech Hickory Spanish Oak Sweet Gum Tulip Poplar Total	22 1 1 2 1 27	478.3 91.7 13.1 32.8 52.4 668.3	2.4 0.6 0.1 0.5 0.4 4.0
365	36	Beech Hornbeam Spanish Oak Total	4 2 2 8	59.0 6.6 26.2 91.8	0.3 - 0.3 0.6
365	38	Beech Black Oak Dogwood Hickory Northern Red Oak Spanish Oak White Oak	68 1 1 1 3 7 82	1415.2 59.0 26.2 9.8 45.9 39.3 131.0	9.6 0.6 0.1 0.1 0.4 0.6 1.4
365	39	Beech	11	19.7	0.1
365	40	Beech Northern Red Oak Total	7 1 8	176.9 78.6 255.5	0.8 0.8 1.6
365	47	Tulip Poplar	1	37.3	0.2
365	48	Tulip Poplar	1	13.1	0.1
365	49	Black Cherry Sweet Gum Total	1 1 2	19.2 13.1 32.3	0.2 0.3 0.5
365	62	Pin Oak Red Maple Total	1 1 2	3.3 3.3 6.6	0.1 0.1 0.2
365	64	Red Maple	1	26.2	0.2

Day of 1974	Box Number	Species	Number of Leaves	Leaf Surface Area (cm <sup>2</sup> )	Dry Weight (ġ)
365	67	Red Maple	2	65.5	0.4
365	68	Red Maple	. 4	104.8	0.9
365	77	Spanish Oak		59.0	0.5

#### Winter Woodland Bird Flocking Data

Technique: Observations were made of bird flocks in the woodlands along the north shore of Muddy Creek estuary from Hog Island marsh along the north fork and the north branch of Muddy Creek to station 1 (map 2) and including all of forest ecology site 2 (see forest ecology map). Area surveyed was about 17 - 18 ha. or a transect about 1,600 - 1,800 meters long. The number of birds above the slash line is the number of birds observed in flocks, the number below the slash line is the number observed not in flocks on a given field trip.

<u>Principal Investigator</u>: Robert Rybzynski, Biology Department, Cornell Univeristy, Ithaca, New York.

Research Funding: Cornell University.

Winter Woodland Bird Populations

					Day of	1974						
	p.m.	p.m.	p.m.	p.m.	р. 9	p.m. 12	a.m. 15	p.m. 16	p.m. 16	a.m. 17	p.m. 17	p.m. 20
Sharp-shinned Hawk		1	1	1	1	1	1	1		1	ı	ı
Cooper's Hawk	1	1	1	ı	1	1	•				ı	
Barred Owl	•	•				1	-1	٠		,	1	
Flicker	١,	1/0	1/0		1	1	1/0	٠		0/2	1/0	1/0
Red-bellied Woodpecker	1/4	1/0	0/3	1/3	1/2	2/1	0/3	1/2	1/4	1/3	2/5	1/1
Yellow-bellied Sapsucker	1	1	1/0	•	1/0	1	1	1/0	1/0	,	1/0	
Hairy Woodpecker	1		١/٥	ı	1/0	1/0	0/2	1/0		1/0		1/0
Downy Woodpecker	0/2	0/2	1/0		1/0	1/1	1	1/0	1/0	0/3	1/2	1/2
Blue Jay	1/0	1/0	0/4			0/2	1	9/0	·	2/4	0/4	9/0
Pileated Woodpecker	1/0	i	٠	1	•	1	1	1		,	,	- 10
Carolina Chickadee	6/2	0/2	4/0	2/1	8/2	3/0	2/1	4/1	3/2	2/0	5/5	2/2
Tufted Titmouse	2/1	2/0	2/0	٠	2/2	1/0	1/0	4/0	'n	3/1	3/2	2/0
White-breasted Nuthatch	1/0	1/0	0/1	1/0	1/1	1/0	1/1	1/0	3/0	0/1	1/1	2/0
Brown Creeper	1/0	2/0	1/1	1/0		1/0	ı		1/0	0/1	[/	1/0
Carolina Wren	0/3	1	1/2	ı	1/0	1/0	1/1	9/0	1/0	4/3	1/0	0/3
Mockingbird	1	1				1	1		٠	1	ı	1/0

Winter Woodland Bird Populations

Day of 1974

	25	27	a.m. 28	р.ш. 28	a.m. 29	p.m. 29	30	31	a.m. 32	p.m. 32	a.m. 33	p.m.
Sharp-shinned Hawk	-1	1	ı	ı		1	1	,	i	ı	ı	
Cooper's Hawk	ı	ı	ı	ı	ı		ı	1	1	ı	1	ī
Barred Owl	1	í	ı	ı	î	1	1	ı	ŧ	ı	ı	
Flicker	!	ı	ı	ı	0/2	1/0	i	ı		1/0	1/0	
Red-bellied Woodpecker	0/5	1/0	2/0	2/2	0/3	0/4	9/2	0/3	2/3	1/2	1/2	0/3
Yellow-bellied Sapsucker	ı	ı	0/2	ı	ı	ı	ı	1/0	1/0	1	ı	1
Hairy Woodpecker	'n	1	1	ı	ſ	ı	e		ı	ı	· ·	ı
Downy Moodpecker	3/0	1/1	1/1	3/0	1/0	1/0	0/3	1/0	1/0	2/2	2/1	1/0
Blue Jay	0/4	9/0	1	1	9/0	1/0	0/2	ı	ı	1	0/2	0/3
Pileated Woodpecker	1/0	ı	ı	ı	ı	1	ı	ı	1/0	ı	t	ı
Carolina Chickadee	8/0	1/2	4/1	5/5	9/0	2/4	2/2	2/0	5/3	9/5	4/0	0/4
Tufted Titmouse	3/0	3/1	5/2	1/3	1/1	1/0	2/0	3/0	3/1	2/0	1//2	1/0
White-breasted Nuthatch	2/0	1/0	0/2	1/0	1/0	1	· ;	1/0	; I	1/0	1/0	1/0
Brown Creeper	1/0		1	3/0	ı	1/1	1/1	1/1	9/1	1/0	ı	ı
Carolina Wren	0/5	1/0	9/0	0/2	3/1	0/2	1/0	1/0	0/2	0/2	1/2	0/2
Mockingbird	ı	١/٥	ı	ı	•	1	ı	١/٥	ı	ı		1/0

Winter Woodland Bird Populations

Day of 1974

	a.m. 35	p.m. 35	р.ш. 36	p.m. 36	a.m. 37	a.m. 37	a.m. 40	p.m. 40	a.m. 42	p.m. 42	a.m. 43	a.m. 46
Sharp-shinned Hawk	1	1	ı	1	1	1	1	1	ı	1	1	-1
Cooper's Hawk	ı	ı				<del></del>		11	1		1	1
Barred	1	ı	ı	ı	ť	1	_	11	1	ı		
Flicker	1/0	1	1	١/٥	1/0	1		1	1	1/0	1/0	1
Red-bellied Woodpecker	0/2	1/4	1/0	1/2	0/3	1/0	0/3	0/2	1/2	0/3	0/4	0/3
Yellow-bellied Sapsucker	1		ı	ı	ı		0/2	0/1	ı	0/2	0/2	
Hairy Woodpecker	,	1/0	ı	ı	1/0		-1		ı		1/0	ı
Downy Woodpecker	1/0	1/1	1/0	0/3	1/0	1/0		1/0	1/0	1/0	ı	0/2
Pileated Woodpecker	1	ı	1	ı		-1	1		1	1	-1	
Blue Jay	ţ			0/2	1	1/9		0/1	0/3	ı	1/0	1/0
Carolina Chickadee	1/0	2/3	1/2	4/3	2/2	3/2	2/4	2/0	2/0	9/0	ŧ	1/9
Tufted Titmouse	2/0	2/0	t	0/3	1/3	4/1	3/1	3/0	1/2	2/0	4/1	1/3
White-breasted Nuthatch	ı	1	1/0	ı	1/0	1/0		1/0	1/0		1/0	
Brown Creeper	1	0/2		1/0	ı	1/1		1/0	1/0	í	ı	1/0
Carolina Wren	1/0	1/1	0/2	1/0	0/2	1/3	1/1		2/0	1/0	2/3	2/3
Mockingbird	ı	ı	ı	0/2		1			ı	ı		

Winter Woodland Bird Populations

						Day of 1974	1974	
	a.m.	p.m. 52	p.m. 55	p.m. 56	a.m. 57	р.ш. 58	р.ш. 60	
Sharp-shinned Hawk	ı	1	1	1				
Cooper's Hawk	٠	ı	ı	ı	ŧ	1	ı	
Barred Owl	President	1	ı	ı	ı	ı	ı	
Flicker	١,	ı		1/0	•	1	١/٥	
Red-bellied Moodpecker	1/2	1/4	0/3	2/1	1/1	0/3	0/2	
Yellow-bellied Sapsucker	ı	1.1	ı	1	1/0	ı	0/2	
Hairy Woodpecker	ı	1.1	1/0	- 1	1	1/0	•	
Downy Woodpecker	1/0	1/0	1/0	3/0	1/0	1/0	ı	
Pileated Woodpecker	ı	1.	1/0	•	1	•	•	
Blue Jay	0/2	ı	0/2	ı	0/2	2/0	0/2	
Carolina Chickadee	2/0	5/6	2/1	1/2	2/0	2/2	1/0	
Tufted Titmouse.	•	2/4	6/0	4/0	2/0	2/2	0/5	
White-breasted Nuthatch	1	•	1/0	0/1	1	•	1/0	
Brown Creeper	1/0	1/0	ר/ו	1/0	1/0	1/0	1/0	
Carolina Wren,	0/3	0/4	0/3	2/1	0/3	0/3	0/3	
Mockingbird	1	1		•	0/1		ı	

Winter Woodland Bird Populations

Day of 1974

	-	2	4	9	6	12	15	a.m. 16	p.m. 16	a.m. 17	p.m. 17	20
Brown Thrasher	1	i e	ı	i	1	1	1	1	ı	1	ı	1
Hermit Thrush	•	ı	ı	ı	i	1	ı	1/0	ı	1	1/0	1/0
Robin	ı	i	1	,		ı	ı	ı	1			
Bluebird	2	1	,	ı	1	2/0	ı	i	-1	1	1	ı
Ruby-crowned Kinglet	·	i	ı			ı	ı	ı	1		1	ı
Golden-crowned Kinglet	1/0	1	1/0	1/0	ı	•	i	1/0	1	1/0	1	1/0
Cedar Waxwing	ı	ı	ı	ı	i	ı	ı	ı	1	•		ı
Myrtle Warbler	ı	ı	ı	1	1/0		ı	1	ı	٠	٠	
Red-winged Blackbird	1	•	ı		1		ı	ı	1	ı	ı	ı
Purple Finch	-1	1	•	-1				ı	ı			ı
Cardinal	4/2	2/0	4/8	1/0	3/4	0/2	0/9	0/3	18/0	3/9	13/2	8/0
Pine Siskin	1	21/0			17		25/0	1	ì	1,	•	1
American Goldfinch		2/0	ı		.2/0	2/0	-1	ı	1	1/0	1	8/0
Rufous-sided Towhee	1/0	3/0	2/0	ı	Į.	ı	1	ı	٠	1	1	1
Junco	2/0	1	3/0	ı	ı	ı	0/9	3/0	3/0	•	1	ı
White-throated Sparrow	4/0	0/11	1/0	0//	8/0	1	0//	4/1	0/9	0/9	4/3	10/0
Swamp Sparrow	ı	1	1	1	1	1	ı	1	ı	1	ı	ı

Winter Woodland Bird Populations

Day of 1974

	25	27	a.m. 28	p.m.	a.m. 29	p.m. 29	30	33	a.m. 32	p.m. 32	a.m.	p.m.
Brown Thrasher	ı	ı	ı	ı	ı	ı	ı	ı	t	1	ı	ı
Hermit Thrush	1/0	1	1	ı	ı	ı	ı	1/0	1/0	ı	t	1/0
Robin	t	t	-1	1	ı	ı	r	ı			-1	ı
Bluebird	3/0	t	t	ı	t	•	ï	ı	1	ı	ı	ı
Ruby-crowned Kinglet	t	¢	i	ı	ı	ı	ı	ı	ı	ı	t	ı
Golden-crowned Kinglet	2/0	ı	2/0	ı	ı	ı	ı	t	ı	1/0	r	0/1
Cedar Waxwing		-	ı	1	ı	ı	ı	ı	ı	ı	r	ŧ
Myrtle Warbler	1	ı	1/0	1/0	ı	1	,	ı	١/٥	1/0	ı	ı
Red-winged Blackbird	ı	ı	ı	ı	ı	ı	ı	ŧ	ı		1	ì
Purple Finch	t	ı	ı	ı	ı	ı	,	ı	ı	ř	ı	ı
Cardinal	8/2	8/0	1/0	2/5	1/1	ı	ı	1/2	4/5	16/0	8/0	3/4
Pine Siskin	0/6	ı	1	1	ı	1	ı	ı	1	1	1/0	ı
American Goldfinch	3/0	1	1	0/1		4/0	1	ı	1/0	2/0	ı	1/0
Rufous-sided Towhee	ı	ı	2/0	3/0	0/9	1	ı	r	ı	1	1/0	2/0
Junco	1		1	1	1	ı	4/0	1	4/0	1	ı	
White-throated Sparrow	12/0	1	0/9	0/1	3/2	0//	4/0	2/0	ı	1/0	1	1
Swamp Sparrow		1			,	1	t	ı	ı	ı	1	1

Winter Woodland Bird Populations

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	a.m. 35	p.m. 35	p.m. 36	p.m. 36	a.m. 37	a.m. 37	a.m. 40	p.m. 40	a.m. 42	p.m. 42	a.m. 43	a.m. 46
Brown Thrasher	ı	1	1	ı	•	١/٥	ı	•	1/0		•	
Hermit Thrush	1/0	ı	1/0	0/1	ı	ı	11	١/٥	1/0	1/0	ı	1/0
Robin	1	•	•		•	ı	•	ı	1	•	•	
Bluebird	, <b>1</b>	3/0	11	2/0	•	1/0	•	ı	•	4/0	•	ı
Ruby-crowned Kinglet	ı	•	11	11	•	ı	,	ı		ı	1	1
Golden-crowned Kinglet	ı	ı	1	1/1	1	1/0	•	1	1/0	1/0	2/0	2/0
Cedar Maxwing	1	1	1	1	•	ı		1	•	•	•	1
Myrtle Warbler	1	1	1	•	1	ı	1/0	0/1	•	1	1/0	1/0
Red-winged Blackbird	1	1	1	1	1	1	ı	1	•		1	
Purple Finch	1	1	1	1	1	ı	ı	1	•	1	•	ı
Cardinal	9/3	3/4	3/4	15/4	5/1	6/2	5/5	4/3	0/6	7/2	18/7	4/2
Pine Siskin	ı		8/0	ı	12/0	i		-1	•	4	•	ı
American Goldfinch	1/0	1/0	3/0	1/0	2/0	ı		п		a	ı	•
Rufous-sided Towhee	1/3	1	1/0	2/1		1	3/0	2/0	2/0	4/0	8/1	1
Junco	ı	ı	ı	ı	ı	1	1	1	ı	1	- 1	1
White-throated Sparrow	2/2	•	1/0	2/0	4/0	0/9	1/6	1/0	13/0	20/0	13/2	11/0
Swamp Sparrow	1	1		ı	•	/0 -	_	•	1/0	1	1	

Winter Woodland Bird Populations

						Day of	1974	
	a.m. 50	p.m. 52	p.m. 55	p.m. 56	a.m. 57	р.ш. 58	p.m. 62	
Brown Thrasher	ı	ı	1	ı	1	. 1	,	
Hermit Thrust	•	ı	1/0	1/0	1	•	1/0	
Robin		ı	1	ı	ı	1	1	
Bluebird	!	0/2	ı	ı	3/0	2/0		
Ruby-crowned Kinglet	•	ı	ı	ı	ı	٠	ı	
Golden-crowned Kinglet	1/0	1/0	2/1	ı	•	•	١	
Cedar Waxwing	•	1	ı	ı		•	١	
Myrtle Warbler	•	1	•	ı	•	١	١	
Red-winged Blackbird	•	ı	ı	ı	1	٠	١	
Purple Finch	•	1				1	ı	
Cardinal	7/4	4/4	1/1	10/1	2/0	4/1	2/0	
Pine Siskin	1	ı	ı	ı	ı	-10	٠	
American Goldfinch	1	1/0	ı	1/0	0/1	4/0	1/0	
Rufous-sided Towhee	1	ı	ı	ı	1	1	ı	
Junco	2/0	2/0	•		1	0/1	•	
White-throated Sparrow	2/0	7/2	9/2	29/0	1/0	6/2	4/0	
Swamp Sparrow	t	1	1	ı	1	1	ı	

Breeding Bird Populations on the Muddy Creek Watershed

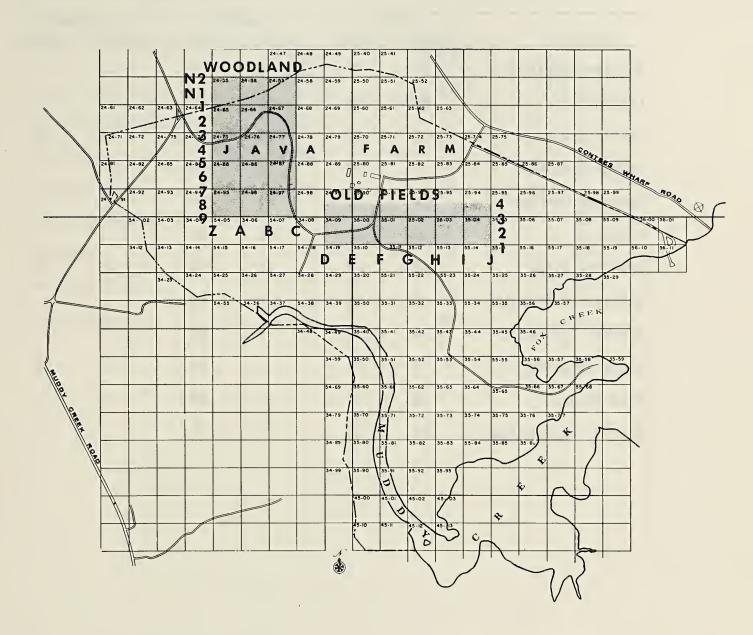
Technique: Populations were surveyed by two methods: (1) capture, marking, release, and recapture; (2) censusing of singing males.

Capture was by means of mist nets arranged in grids in woodlands and in old fields. Breeding birds were banded with Fish and Wildlife Service bands. Effective areas of study were woodland, 24 hectares; (rows Z, and A-C), old fields (rows D-J), 17.5 hectares. Woodland locations was immediately northwest of the station (map 2) and the old fields location was south and southeast from the station (map 2).

<u>Principal Investigator</u>: Francis S. L. Williamson, Chesapeake Bay Center for Environmental Studies, Smithsonian Institution.

Research Funding: Smithsonian Institution.

FIGURE 1. ARRANGEMENT OF NET SITES IN MATURE WOODLAND (ROWS Z, A, B, C) AND OLD FIELDS (ROWS D-J). SITE F4 ELIMINATED IN 1972 DUE TO ENCROACHMENT OF HUMAN ACTIVITY.



1346

Sex Ratios of Adult Birds Captured from May 28 - July 2, 1974

And the state of t	Ma	1e	Ferr	iale	Unk	nown
Species	Number	Percent	Number	Percent	Number	Percent
Acadian Flycatcher	11	42	8	31	7	27
Cardinal	28	48	30	52	ශා	-
Carolina Wren	6	12	27	55	16	33
Indigo Bunting	5	50	5	50	-	G <sub>2</sub>
Kentucky Warbler	14	70	6	30	and	Gao.
Ovenbird	10	56	7	39	7	5
Red-eyed Vireo	16	28	26	46	15	26
Rufous-sided Towhee	9	60	6	40	gree	-
Scarlet Tanager	4	40	6	60	<b>SCAL</b>	san
White-eyed Vireo	7 ·	47	7	47	1	6
Wood Thrush	76	59	51	40	2	1
Yellow-breasted Chat	16	64	9	36	<b>****</b> 0	

Percent of Individuals of the More Numerous Species Returning in the Summer of 1974 that were Captured in 1973.

Species	Number Captured in 1973	Number Returned in 1974	Percent Returned
Acadian Flycatcher	26	3	12
Cardinal	46	13	28
Carolina Wren	31	10	32
Kentucky Warbler	8	2	25
Ovenbird	17	2	12
Red-eyed Vireo	39	4	10
Wood Thrush	75	26	35

Survivorship in Birds Banded as Adults

					<b>\</b>	ears	ears of Surviva	vival					
Species	*@	B* 1**	*a	2 ** S	*_	» «**		* 8	**s	B*	×**	9 *a	**
Acadian Flycatcher	11	9	49	4	43	_		33	0	25	2		
Cardinal	152	32	116	6	95	12		92	2	42	က	28	_
Carolina Wren	52	6	25	4	22	2		17	m	ı	1		
Kentucky Warbler	41	œ	33	က	1				1	ı	ı		
Ovenbird	40	2	26	က	21	က		14	_	1	i i		
Red-eyed Vireo	126	13	96	œ	84	=		61	2	52	2	40	63
Wood Thrush	205	34	151	15	124	12		73	12	20	lacon.	30	2

\* B = number that could have survived that given number of years.

<sup>\*\*</sup> S = number known to have survived that given number of years.

Distribution of Breeding Species by Preferred Feeding Stratum. Numbers Next to Species Give Percent of Total Biomass in that Habitat.

Stratum	Mature Woods	Habitat	Secondary	
Bark	Red-bellied Woodpecker	10.7	Red-bellied Woodpecker	3.2
			Downy Woodpecker	2.5
Ground	Bobwhite	6.2	Bobwhite	25.6
	Common Flicker	2.3	Mourning Dove	6.1
	Louisiana Water Thrush	1.4	Rufous-sided Towhee	5.6
	Ovenbird	1.3		
Understory	Cardinal	12.8	Cardinal	22.2
	Carolina Wren	3.8	Carolina Wren	1.9
	Gray Catbird	2.8	Gray Catbird	9.
	Kentucky Warbler	1.9	Prairie Warbler	1.2
			White-eyed Vireo	-
			Yellow-billed Cuckoo	5.6
			Yellow-breasted Chat	4.6

Distribution of Breeding Species by Preferred Feeding Stratum. Numbers Next to Species Give Percent of Total Biomass in that Habitat. (Continued).

		Habitat	The state of the s	
Stratum	Mature Woods		Secondary	
Low Canopy	Acadian Flycatcher	5.6		
	Blue Jay	2.9	Blue Jay	4.0
	Eastern Wood Pewee	L. 3		
	Tufted Titmouse	2.3		
High Canopy	Great Creasted Flycatcher	general Security		
	Red-eyed Vireo	11.2	Red-eyed Vireo	8.
	Scarlet Tanager	2.4	Scarlet Tanager	2.0

Summary of Captures of Breeding Adult Species in Mature and Secondary Woodlands in 1974.

							MATURE	MATURE WOODLAND	D							
Date	Net Rows	S	Woodthrush N	ush R	Cardina	<u>~</u> ≃	Acadian Flycatcher N R	her R	Red-eyed Vireo N R	ed R	Kentucky Warbler N	چ د ∝	Other N	يد	Total	~
5/28	A, .	7	æ	0	9	0	2	0	_	0	0	0	12	0	48	0
6/3	В,	ပ	9	0	ω	_	p-n-a	0	10	0	_	0	13	0	39	-
6/4	A, 7	7	2		m	_	2	L	2	0	0	0	2	m	20	10
01/9	В,	ပ	7	4		2	2	0	2	0	က	0	6	_	27	7
6/11	Α,	7	4	2	2	_	4	0	0	0	2	4	7	0	19	7
6/17	В, (	ပ	9	Ŋ	9	0	0	_	2	0	2	0	9	_	22	7
6/19	A, 7	7	4	4	0	0	0	0	4	0	0	0	r2	0	13	4
6/25	В,	ပ	6	4	2	_	2	0	4	<b> </b>	0	m	6	m	26	12
6/27	A, 7	7	2	12	_	0	0	0	2	0	2	_	2	0	12	13
7/2	В, (	ပ	9	വ	_	_	0	0	_	2	0	2	_	_	6	barro barro

\* N = number of birds captured for the first time and newly banded.

\*\* R = number of birds banded previously in the 1974 breeding season and recaptured.

Summary of Captures of Breeding Adult Species in Mature and Secondary Woodlands in 1974.

						SE	CONDAR	Y WOOD!	AND								
		-pooM	-			Red-eyed	eyed	Carolina	lina	White-eyed	eyed	yellow- breasted	w- ted				1
Date	Rows	thr N	ush R	Sarc	Cardinal N R	Vireo	~	Wren N	~	Vireo N	~	Chat N	~	Other N	er R	Total	a] R
9/9	D-J	9	0	12	0	က	0	4	0	2	0	22	0	16	0	51	0
6/13	D-1	_	0	က	0	က	0	13	0	2	0	2	0	15	_	42	<b>,</b> —
6/20	D-J	_	_	<u>-</u>	0	က	_	_	0	2	2	4	0	10	_	22	Ŋ
97/9	D-J	2	2	-	_	2	0	m	-	0	0	က	0	Ε	2	22	9
١//٢	D-J	4	0	-	0	2	2	_	_	0	0	2	2	თ	2	25	7

\* N = number of birds captured for the first time and newly banded.

\*\* R = number of birds banded previously in the 1974 breeding season and recaptured.

Population Size and Biomass of Birds in Secondary Growth and Mature Woodland during the 1974 Breeding Season. Estimates are Made Using the Spot Map Technique for Singing Males.

	Se	condary	Ma:	ture
Species	No.	Biomass (g)	No.	Biomass (g)
Bobwhite Colinus viginianus	6	1116.0	2	372.0
Acadian Flycatcher Empidonax virescens	2	2.7	25	337.5
American Goldfinch <u>Spinus tristis</u>	1	13.4	-	-
Black and White Warbler Mniotilta varia	-	-	2	22.2
Blue-gray Gnatcatcher Poliptila caerulea	one	-	1	5.6
Blue Jay <u>Cyanocitta</u> <u>cristata</u>	2	176.2	2	176.2
Cardinal Cardinalis cardinalis	24	972.0	19	769.5
Carolina Chickadee Parus carolinensis	3	27.6	6	55.2
Carolina Wren Thryothorus hidovicianus	4	84.0	11	231.0
Common Flicker . Colaptes auratus	095	-	1	135.9
Common Yellowthroat Geothlypis trichas	2	19.6	-	-
Downy Woodpecker Dendrocopos pubescens	2	53.2	-	-
Eastern Wood Pewee <u>Muscicopa</u> <u>virens</u>	-	-	5	76.0
Gray Catbird <u>Dumetella cardinensis</u>	2	83.6	4	167.2

Population Size and Biomass of Birds. (Continued)

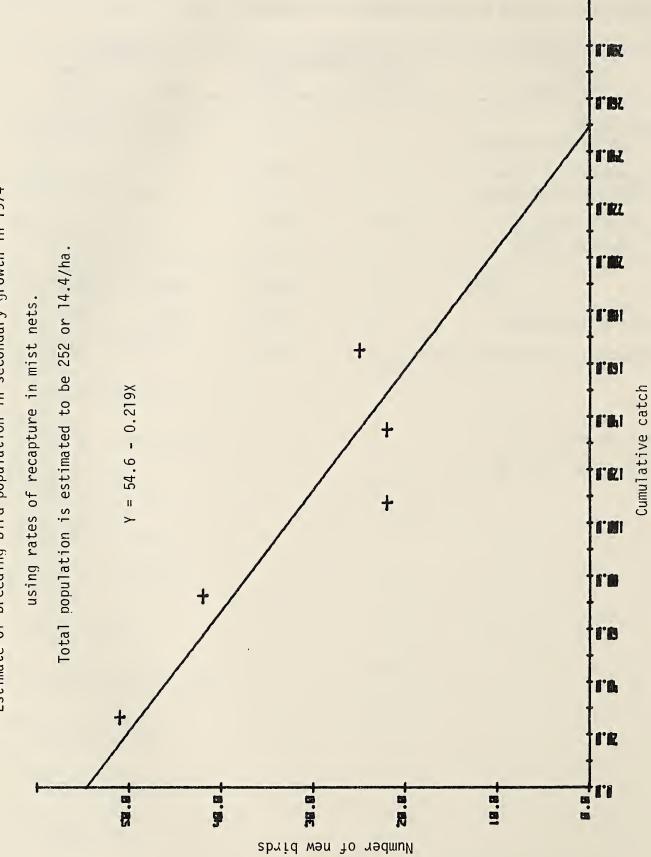
	Sec	condary	Mai	ture
Species	No.	Biomass (g)	No.	Biomass (g)
Great Crested Flycatcher  Myiarchus crinitus	-	-	2	68.4
Hooded Warbler <u>Wilsonia</u> <u>Citrina</u>	-	-	2	20.8
Indigo Bunting Passerina cyanea	3	42.6	-	-
Kentucky Warbler Oporornis formosus		-	8	112.0
Louisiana Waterthrush <u>Seiurus</u> motacilla	-	-	4	84.4
Mourning Dove Zenaidura macroura	2	265.2	-	-
Ovenbird Seiurus aurocapillus		-	4	76.0
Parula Warbler Parula americana	1	7.8	6	46.8
Prarie Warbler <u>Dendroica</u> <u>discolor</u>	7	51.8	-	0
Red-bellied Woodpecker Centurus carolinus	2	142.2	9	639.9
Red-eyed Vireo Vireo olivaceus	22	352.0	42	672.0
Rufous-sided Towhee Pipilo erythrophthalmus	6	246.6	-	0
Scarlet Tanager <u>Piranga</u> olivacea	24	972.0	19	769.5
Tufted Titmouse Parus bicolor	2	46.2	6	138.6
White-eyed Vireo Vireo griseus	4	48.4	-	-

Population Size and Biomass of Birds. (Continued).

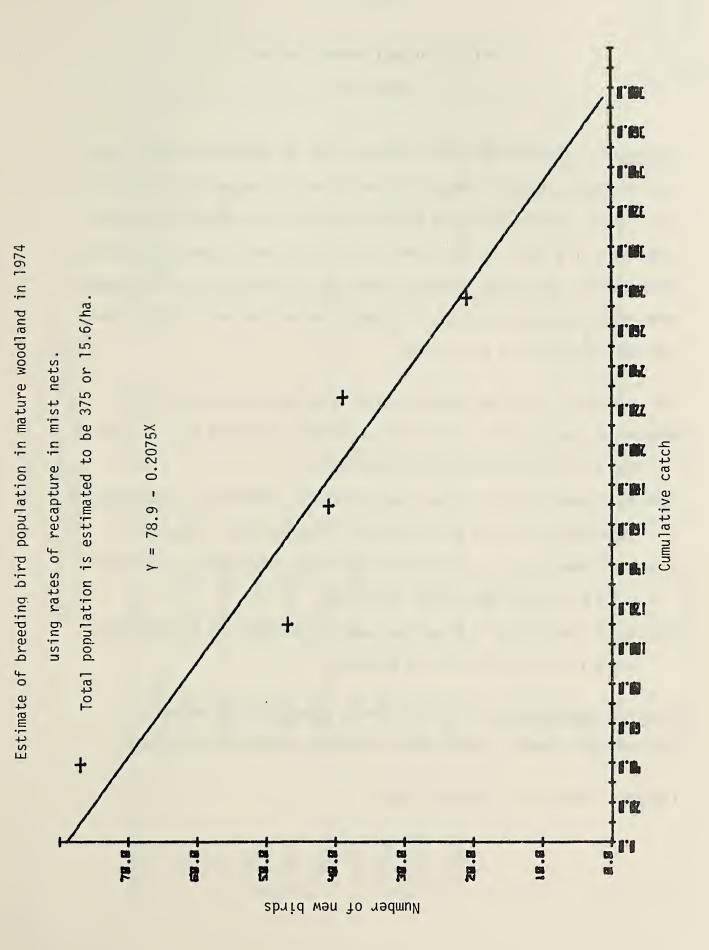
	Sec	condary	Mat	ure
Species	No.	Biomass (g)	No.	Biomass (g)
Wood Thrush <u>Hylocichla</u> mustelina	1	49.5	33	1633.5
Yellow-billed Cuckoo Coccyzus americanus	4	246.8	-	-
Yellow-breasted Chat <u>Icteria virens</u>	8	201.6	-	-
TOTAL	113	4360.9	198	5987.0
Eliminating Bobwhite	107	3244.9	196	5615.0
Density/ha (eliminating Bobwh	ite 5.1	185.4	8.2	234.0

Mature woods = 24 ha

Secondary = 17.5 ha



Estimate of breeding bird population in secondary growth in 1974



## Preliminary Small Mammal Survey Java Farm

Technique - Three habitats were sampled using two parallel lines at each site of "museum special" snap traps prebaited with peanut butter and oats for 5 days. Results are based on 50 traps set for 3 consecutive nights. Traps were 10 m apart in the lines and the lines were separated by 20-30 m. Forty Sherman live traps (3x3x10") were used in Site No. 4. The standard mark-release-recapture method, with peanut butter and oats as bait, was used for 3 consecutive trap nights.

The locations of the four sampling sites (see map 5) are given below:

- Site No. 1 consisted of a line from coordinates 4900-3700 to 5150-3700 and a line from 4900-3680 to 5150-3680.
- Site No. 2 consisted of a line from coordinates 4900-4200 to approximately 4925-4425 and a line from 4920-4200 to approximately 4945-4425.
- Site No. 3 consisted of a line from coordinates 6300-3980 to 6550-3980 and a line from 6300-3960 to 6550-3960.
- Site No. 4 consisted of a line from coordinates 6300-3200 to 6500-3200 and a line from 6300-3180 to 6500-3180.

<u>Principal Investigator</u>: Sheila D. Minor, Chesapeake Bay Center for Environmental Studies, Smithsonian Institution, Edgewater, Maryland.

Funding: Smithsonian Federal Funds.

SPECIMEN DATA

Preliminary Small Mammal Survey Work Java Farm May, July - August, 1974

						13	59									clipped 1	clipped 2
	1												:	+	;	Toe	No.
(mm)	Ear	91	17	16	5	16	1/	'	1	1	16	17				'	'
nents	쮸	20	21	22	20	20	ī	13	18	19	20	21				1	ı
sasurer	Tail	72	9/	78	75	73		23	27	20	74	75				Ľ	1
External Measurements	Total Length	158	168	170	158	162		212	105	115	156	159	captures	captures	captures	ı	1
Weight	(6)	91	18	21	16	20	15	ı	ı	1	91	•	no ca	no c	no c	ad? -	ad -
Age		ad	ad	ad	ad	ad	ad	ad	ad	ad	ad	ad				sub	sub
Sex		ш.	ᄕ	Σ	LL.	Σ	LL	LL.	<i>~</i> .	ഥ	ഥ	<b>LL</b> .				Σ	LL_
Species		P. leucopus	Jeucopus	Jeucopus	Jeucopus	Jeucopus	brevicauda	brevicauda	brevicauda	B. brevicauda	P. leucopus	P. Teucopus		,		palustris	palustris
	او	۵.	Ф.	۵.	۵.	ď	B.	В.	B.	B.	Ф.	۵.	•	1	1	0.	0.
Date	Collected	7/17/74	7/17/74	7/11/74	7/18/74	7/19/74	7/24/74	7/24/74	7/25/74	7/26/74	8/13/74	8/14/74	8/15/74	5/8/74	5/9/74	5/10/74	5/10/74
Collector's ID No.		WR-1	WR-2	No. WR-3	eti WR-4	S WR-5	SDM-52	SDM-53	之 g SDM-54	ੱ 5 SDM-55	ε.	oN e	) 1	ī	, ,	о Ио	Sitc

SUMMARY

Preliminary Small Mammal Survey Work Java Farm May, July - August, 1974

Species	Peromyscus leucopus (white-footed mouse)	Blarina brevicauda (short-tailed shrew)	Peromyscus leucopus (white-footed mouse)	Oryzomys palustris (marsh rice rat)
Total Captures	2	4	2	2
Total Trap Nights	150 (Museum specials)	150 (Museum specials)	150 (Museum specials)	120 live traps
Dates Trapped	16-19 July 1975	23-26 July 1975	13-15 Aug. 1975	7-10 May 1975
Site	No. 1 Forest	No. 2 Conifers	No. 3 Old Field	No. 4 Hog Island Marsh

## Sunlight - Incident Total White Light Intensities at CBCES Dock (Map 2)

<u>Technique</u> - Detector was an Eppley precision pyranometer with a clear quartz dome mounted on the roof of the instrument shed at the end of the dock. Data points were recorded every 10 minutes.

<u>Principal Investigator</u>: Robert Cory, U.S. Geological Survey,

Chesapeake Bay Center for Environmental Studies.

Research Funding: U.S. Geological Survey.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). January 1974. Table

Hour					Day	of 1974					
of Day	L	2	3	4	2	9	7	8	6	10	=
0200-0600	ı	ı	1	ı	ı	-	1	ı	ı	1	•
0020-0090	ı	ı	1		ı	ı	ı	ı	ı		
0700-0800	1	.05	1	.00	.0	ı	.01	.03		ı	
0800-0000	.02	.21	. 02	.07	.07	.04	.12	.26		1	
0001-0060	.08	. 8	60.	F.	.15	90.	.12	.41	.01	.00	.01
1000-1100	14	.55	.14	.14	.20	=	.18	.5	.07	.07	.04
1100-1200	91.	.64	.12	80.	.27		. 28	.58	.20	.05	.08
1200-1300	.21	.64	.10	(80°)	.41	60.	.32	09.	.23	.07	14
1300-1400	91.	.53	.10	(.08) <sup>a</sup>	.43	60°	.22	.33	.19	.12	8.
1400-1500	60.	.31	.04	(.04) <sup>a</sup>	.30	90.	.34	(.31) <sup>a</sup>	.20	60.	.13
1500-1600	.08	.08	.02	(.02) <sup>a</sup>	.20	90.	.14	(.25) <sup>a</sup>	-	80.	.08
1600-1700	.01	.00	ı	ı	90.	.00	.03	(.18) <sup>a</sup>	kem kem	.04	6.
1700-1800	1	ı	1	1	1	1		.07	.04	.00	5.
1800-1900	1	ı	1	ı	ı	1	1			ı	14
1900-2000	1	1	1	1	1	1	1	1	1	i	•
Total	58.8	190.8	37.8	37.8	126.0	37.8	105.6	211.8	9.69	32.4	40.8
avalue includes some estimated hourly v	udes some	estimated	hourly va	Jues.							

value includes some estimated hourly values.

January 1974. (continued)

Hour					Day	Day of 1974					
of Day	12	13	14	15	16	17	18	19	20	21	22
0200-0600	ı	I	•	ı	1	ı	ı	ı	1		•
0020-0090	ı	ı	1		1	ı	ı	١.,	ı	ı	•
0700-0800	ı	ı	٠		ı	1	•	.04	6.		90.
0800-0900	1	.00	.00	.02	.04	90.	.01	.12	.04	.00	.27
0001-0060	.03	.14	.07	.23	90.	.22	.04	.31	.08	.0	. 56
1000-1100	.25	.30	6.	.46	<u>ب</u>	.45	.08	.53	.12	.07	99.
1100-1200	.47	.27	.30	.62	.56	.59	.13	.14	Ε.	F.	.72
1200-1300	.71	.34	.29	.72	.48	.47	.15	buses buses	.12	.15	.71
1300-1400	. 58	.41	.30	.61	.47	.28	.14	F.	-	. 28	.67
1400-1500	.36	.64	.14	(.39) <sup>a</sup>	39	.12	.12	.05	90.	.29	.49
1500-1600	. 22.	.34	80.	Ξ.	.20	because house	bone Secon	.04	.05	.27	.30
1600-1700	.34	.33	.05	. 05	.13	.05	.07	.00	.02	.07	.00
1700-1800	F.	F.	.05	(.03) <sup>a</sup>	.03	.00	.02	ı		ı	•
1800-1900	ı	1		ı	1	ı	ı	ı	i	ı	1
1900-2000	1	•	1	-	•	1	-	1	1	1	•
Total 184.2 173.4 88.8	184.2	173.4	88.8	4	160.2	141.6	52.2	87.6	43.2	75.6	271.8
וטער טוורייא	Caco copi.	てくれておったくく	7 21 01109	2011							

"value includes some estimated hourly values.

January 1974. (continued)

	31	ı	ı	.04	.13	.28	.31	.37	.65	.72	.55	.37	2.	.0	1	1	213.0
	30	ı	ı	90.	.26	.51	.70	.81	.83	.73	.57	.36	4	.01	1	ı	297.6
	29	1	ı	.08	.29	.54	.51	.54	92.	.62	.41	.21	.07	ı	ı	•	241.8
Day of 1974	28	1	ı	.03	.18	.32	.24	.25	4	.25	.21	. 05	.00	I	ı	1	100.8
Day	27			.05	.31	.54	.71	.80	.81	.75	.45	.33			1	ı	291.6
	26	ı	i	.01	.03	60.	=	.12	.15	.15	90.	.02	.01	ı	ı	1	45.0
	25	ı	ı	. 02	90.	.26	.41	.30	.35	.37	.22	91.	.07	ı	ı	ı	133.2
	24	ı	ı	.01	.03	90.	.08	.05	90.	.07	90.	.04	.00		ı	ı	28.2
	23	ı	1	.04	. 26	.51	.61	.71	.62	.43	.29	91.	.04	ı	1	N)	220.2
Hour	of Day	0200-0600	0000-0090	0700-0800	0800-0080	0000-10060	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). February 1974. Table

Hour					Day	Day of 1974					
	32	33	34	35	36	37	38	39	40	41	42
0200-0600	ı	ı		ı	ı	ı	ı	ı	ı	ı	ı
0000-0090	1	i	ı	1	ı	ī	ı	1	,	1	ı
0700-0800	.07	.00	٠	.08	.10	90.	.00	ı	.18	.13	=
0060-0080	.25	60.	.0	.20	.36	.23	90.	.00	.48	.40	.37
0900-1000	.37	. 14	.03	.24	.60	.19	.08	.07	. 68	. 68	. 64
1000-1100	.49	F.	.05	.68	77.	.27	.19	.08	.80	.80	.83
1100-1200	.45	.17	.04	.82	.87	.34	.24	60.	.89	06.	. 94
1200-1300	.41	.20	.03	69.	. 88	.25	91.	.10	.91	.75	.94
1300-1400	.47	.13	.03	.67	.80	.16	(.14) <sup>a</sup>	.10	.84	.71	98.
1400-1500	. 62	60.	.02	.62	.64	60.	(.10) <sup>a</sup>	.03	.64	. 68	.70
1500-1600	.30	.03	.01	.38	.41	.04	60.	90.	.37	.41	.48
1600-1700	.14	.01	.01	.14	.17	.02	. 04	.04	.13	.15	.21
1700-1800	1	1	٠	.01	.01	ı	ı	ı	.01	.01	.01
1800-1900	1	ı	٠	1	1	ı	ı	ı	ı	ı	
1900-2000	1	•	•	-		1	1	1	ı	1	1
Total	214.2	58.8	13.8	271.8	336.6	0.66	9.99	37.8	355.8	337.2	365.4

avalue includes some estimated hourly values.

February 1974. (continued)

	53	ı	ı	.05	01.	91.	.16	.63	.77	.80	.64	.49	.21	.00	ı	ı	241.2
	52	l	ı	.15	.41	99.	.84	. 89	76.	6.	.70	.48	.24	.03	ı	ı	376.8
	51	t	,	.02	.19	.64	. 83	96.	.97	. 92	.78	.56	.31	90.		P	374.4
	50	ı	ı	.02	90.	60.	.08	.16	.21	.03	.03	.03	90.	. 02	1	1	47.4
	49	1	ı	.12	.42	. 65	.83	96.	66.	.90	.75	.51	.25	.04	ı	ı	384.0
Day of 1974	48	ı	ı	90.	.15	.27	.67	.87	. 68	06.	. 55	.44	.26	.04	,	,	293.4
Day	47	ı	ı	.05	.14	.19	.23	.15	.20	.13	90.	.04	.03	.01	٠	1	73.8
	46	ı	,	.01	.05	. 22	69.	06.	.80	.87	. 67	. 50	. 25	.04	1	î	300.0
	45	ı	ı	. 08	323	. 31	.34	3.31	1 .12	5 28	1 .24	9 .14	. 05		ı	ı	126.0
	44	ı	1	5 .07	5 .33	. 62	1 .62	.88	74.	97. 1	5 .64	5 . 49	.2	1 .02	1	1	322.8
	43	ł	1	90.	.36	09.	.61	.77	.77	.77	.36	.35		.00	ı		279.0
Hour	of Day	0500-0600	0020-0090	0700-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

Day of 1974	59	I	5	.21	.48	69.	(.93) <sup>a</sup>	(1.00) <sup>a</sup>	(1.01) <sup>a</sup>	.93	.78	.5	.12	.02	ı	1	401.4
Day	28	ı	.05	.34	.59	.75	.84	1.02	1.03	.59	.41	.42	.15	.03		1	373.2
	22	8	5	.20	<u></u>	.76	. 95	1.04	1.03	96.	.79	.56	.30	.04	ı	1	429.0
	56	1	•	.02	80.	.19	.34	.29	.53	.42	.42	.47	.23	6.	ı	ı	180.0
	52		5.	.20	49	.73	98.	.92	6.	.94	.68	.37	Ξ.	.00	ı	1	373.8
	54	ı	5.	.20	.50	.75	జ	1.03	1.03	.94	.78	.53	. 28	.05	ı	1	415.8
Hour	of Day	0200-0600	0000-0090	0700-0800	0800-0800	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

avalue includes some estimated values.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). March 1974. Table

Hour					Day	of 1974					
of Day	09	19	62	63	64	65	99	29	89	69	70
0200-0600	1	1	1	1		1	1	1	1		
0020-0090	.01		.01	.01	.01	.02	.02	.01	1	ı	. 02
0700-0800	.22	.02	.15	.13	.16	.26	.12	.15	.04	.05	.29
0800-0900	.53	.08	.37	.36	.31	.38	.24	.42	.07	.23	. 55
0900-1000	.54	. 25	.54	.22	.15	.40	(.52) <sup>a</sup>	.67	.14	. 59	.64
1000-1100	. 56	. 53	.62	.46	.07	.39	.83	.87	.14	.71	.90
1100-1200	06.	. 89	. 88	.77	bear bear	.23	.92	.68	.17	1.01	1.14
1200-1300	1.04	.61	. 89	06.	.25	.30	.88	.93	.24	.71	1.02
1300-1400	96.	.87	.83	.83	.23	. 23	96.	.62	.20	.03	.71
1400-1500	.79	.51	.62	.72	.19	.10	.80	(.79) <sup>a</sup>	.15	.72	.25
1500-1600	.53	.49	.37	.42	60.	.03	.31	.51	.08	.34	.19
1600-1700	. 22	Ξ.	91.	.20	.04	.03	.08	.27	.04	.13	.05
1700-1800	.04	.03	.02	.03	.02	.00	.05	.08	.00	.07	.00
1800-1900	ı		1	1				1	ı		•
1900-2000	1	1	1	1	1	•	•	1		1	•
Total	380.4	263.4	326.4	303.0	8.76	142.8	342.6	360.0	8.92	322.2	346.2
a value includes some estimated boundly	omos sopii	octimato.	7 2 2 2	201167							

dvalue includes some estimated hourly values.

Table March 1974. (continued)

Hour					Day	Day of 1974					
of Day	7.1	72	73	74	75	9/	77	78	62	80	81
0200-0600	ı	1	1	ı	ı	1	1	1	1	ı	ı
0020-0090	.01	.03	.03	(.03) <sup>a</sup>	.02	.01	.03	.01	ı		.07
0700-0800	.13	.30	. 28	(.26) <sup>a</sup>	.15	.14	.31	60.	.05	.02	.38
0060-0080	. 26	.62	. 58	. 55	.39	.33	.62	.32	.27	.03	99.
0000-1000	.30	. 87	.84	.80	90.	. 56	06.	.32	.73	.03	.92
1000-1100	69.	1.07	1.04	.73	60.	.82	1.08	.16	.85	.04	1.12
1100-1200	69.	1.18	1.16	1.02	90.	.74	1.19	.25	.92	.10	1.24
1200-1300	.61	1.18	1.18	1.07	90.	1.07	1.21	. 58	.87	.80	1.24
1300-1400	.27	1.10	1.10	1.04	.07	. 84	1.13	.49	.95	1.06	1.16
1400-1500	.19	. 94	.94	.92	.03	.70	. 98	.26	.6	.85	1.00
1500-1600	.17	.72	(.72) <sup>a</sup>	.78	.05	.72	.73	.12	.70	.61	.76
1600-1700	60.	.44	(.44) <sup>a</sup>	.41	.03	. 44	.44	.03	.41	.40	.45
1700-1800	.02	.15	(.15) <sup>a</sup>	.12	ι	.08	.17	.04	.15	60.	.20
1800-1900	i	1	1	ı	ı	•	٠	ı	1		.01
1900-2000	1	1	1	1	•	1	1	1	1	•	1
Total	205.8	516.0 507.6	507.6	463.8	0.09	387.0	527.4	160.2	408.6	241.8	552.6

dalue includes some estimated hourly values.

Table March 1974. (continued)

	06		.02	80.	.20	.24	.42	.37	.16	.23	.40	.61	.46	90.			195.0
	89	0.	.01	.04	.07	.08	60.	80.	90.	.00	.03	60.	60.	.05		1	42.0
	88		.02	.05	.10	.07	90.	90.	.04	90.	.05	.03	.02	.01		•	34.2
F 1974	87	1	11.	.36	.61	.87	1.06	1.14	1.11	1.01	.92	.61	.27	.08	.00	ı	489.6
Day of 1974	36		.05	.31	.54	.81	1.09	1.23	1.24	1.10	.83	.29	.25	.12	.00	ı	471.0
	85		.10	.39	69.	.74	1.12	1.21	1.21	1.11	76.	.71	.36	.16	.00	1	526.8
	84	ı	.03	.13	.26	.43	.50	.64	.70	1.21	.97	.62	.40	Ξ.	.01	1	360.6
	83	1	90.	.25	.56	. 82	.63	99.	.61	.75	.83	.72	.24	91.	.01	1	378.0
	82		.07	.29	09.	88.	1.08	1.18	1.20	1.04	. 94	.85	.72	.15	.01	1	540.6
Hour	of Day	0200-0600	0020-0090	0700-0800	0800-0080	0000-10060	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). April 1974. Table

Hour					Day	Day of 1974					
of Day	16	92	93	94	95	96	26	86	66	100	101
0200-0600	1	ı	1	•	. 8	1	ı	ı	ı	.00	.03
0000-0090	5.	. 05	4-	ı	.04	60.	.20	.12	.01	.20	.27
0700-0800	.17	.07	.42	.07	F.	388	.50	<u>د.</u>	.03	.50	.49
0800-0080	.19	8.	.72	60.	91.	.78	.80	.24	.04	.80	.64
0000-10060	.49	.30	.87	-	. 09	.67	91.1	.19	.10	1.05	.95
1000-1100	.81	.62	1.20	.21	.05	.70	1.23	.26	.16	1.22	1.01
1100-1200	16.	. 55	16.	.18	.10	. 98	1.28	F.	.12	1.32	1.23
1200-1300	1.03	.57	1.20	.28	.15	.57	1.21	.08	4.	1.32	1.19
1300-1400	16.	.42	1.16	.25	.28	. 52	.80	60.	.16	1.24	1.09
1400-1500	16.	66.	.94	.16	69.	.39	1.07	80.	.16	1.08	.65
1500-1600	.61	.75	.50	.15	.57	.39	. 58	.04	6.	.85	. 55
1600-1700	. 23	.46	.23	.07	.36	.44	.29	10.	60°	.52	.42
1700-1800	90.	.16	.03	.02	.14	.14	.08	1	. 02	.20	.18
1800-1900					ı	-1	1	ı	1	.013	· 0.
1900-2000	1		1	1	1	ì	•	9	1	ı	-
Total	388.2	307.2	499.2	95.4	164.4	363.0	552.0	84.6	73.2	619.2	522.6

Table April 1974. (continued)

					Day o	Day of 1974					
Hour of Day	102	103	104	105	106	107	108	109	110	111	112
0200-0600	.04	ı	1	.02	.03	.02	.02	.02	.04	.03	.04
0000-0090	.17	.02	.05	.21	.23	.25	.26	.10	.26	.25	.15
0700-0800	.32	.04	.19	.57	.31	. 53	. 54	.31	.58	.56	.46
0800-0080	.73	90.	.26	.84	.33	.82	1.21	.41	98.	.85	.87
0900-1000	.95	.12	.29	(.94) <sup>a</sup>	36	1.08	1.06	.40	1.13	1.08	1.08
1000-1100	.81	.14	.45	1.03	.53	1.26	1.23	.30	1.28	1.25	1.10
1100-1200	.84	.31	. 56	1.41	.89	1.35	1.29	1.02	1.35	1.32	1.31
1200-1300	1.06	.27	.63	1.36	1.39	1.34	1.32	92°	1.37	1.32	1.21
1300-1400	1.00	.59	.87	1.08	1.31	1.25	1.24	.55	1.28	1.18	.81
1400-1500	.87	.82	.64	1.06	1.09	1.05	1.07	.35	1.10	. 89	.71
1500-1600	17.	.81	.29	.82	.83	.82	.8	.34	.86	.60	.28
1600-1700	.30	.46	.36	.54	.53	. 54	.53	Ę.	. 58	. 59	.19
1700-1800	.21	.14	.19	.26	.12	.23	.22	.24	.25	.14	.07
1800-1900	.03	.02	.02	.02	.00	.02	.02	.02	.02	.05	.01
1900-2000	1	•	•	•	•	1	1		1	1	-
Total	482.4	228.0	288.0	9.609	477.6	633.6	649.2	295.8	9.759	9.909	497.4
avalue includes some estimated bourly	ludes some	estimate	d hours	sell ev							

'value includes some estimated hourly values.

April 1974. (continued)

	120	.05	. 28	.54	.82	1.05	1.20	1.33	. 92	1.09	.84	.80	.44	.25	.04	•	579.0
	119	.03	.18	.40	.67	.97	1.21	1.22	1.35	1.22	1.02	.80	. 53	.22	.03		591.0
Day of 1974	118	(.03) <sup>a</sup>	(.20) <sup>a</sup>	(.50) <sup>a</sup>	(.60) <sup>a</sup>	.71	.79	96.	1.00	.93	.53	.80	.46	.28	.03	1	469.2
Day o	117	1					t	ATAO	ON							1	
	116	,					t	ΛΤΑα	ON								
	115	.04	.30	.61	.89	1.14	1.30	1.39	1.38	(1.30) <sup>a</sup>	(1.10) <sup>a</sup>	(.80) <sup>a</sup>	(.55) <sup>a</sup>	(.30) <sup>a</sup>	(.02) <sup>a</sup>	1	667.2
	114	.03	.10	.26	.38	.36	.36	.39	.40	.50	. 28	.10	80.	.02		1	195.6
	113	.02	.07	.16	.39	١٢.	1.27	1.37	1.38	1.28	.92	.18	.07	.08	.01	ı	474.6
Hour	of Day	0500-0600	0020-0090	0700-0800	0060-0080	0001-0060	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

avalue includes some estimated hourly values.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). May 1974. Table

122 123 124 125 126 127  3 .06    -						Day of	of 1974					
10 .06 .04 .10  3.02 .38 .28 .14 .34  1.08 .16 .52 .52 .66  1.09 .66 .90 .96  1.108 11.34 .76 11.30 11.38  1.08 11.33 .50 11.18 11.26  1.08 1.33 .50 11.18 11.26  2.52 .90 .20 .20 .70  3.37 .62 .12 .16 .60  3.37 .62 .12 .16 .60  3.37 .62 .12 .16 .60  3.33.2 708.6 378.0 549.6 637.2 66		12	.2	123	124	125	126	127	128	129	130	131
3       .02       .38       .28       .14       .34         10       .66       .52       .52       .66         128       .98       .66       .90       .96         138       1.20       1.00       1.12       1.06         156       1.34       .76       1.38       1.48         1.28       1.42       1.00       1.36       1.48         1.08       1.33       .50       1.18       1.26         1.08       1.14       .32       .76       1.15         1.08       1.14       .32       .76       1.15         1.1       .37       .62       .12       .16       .60         1.14       .30       .04       .06       .30         1.14       .30       .04       .06       .30         .04       .02       -       -       -         .04       .05       .02       .02         .04       .05       .02       .02         .04       .05       .07       .02         .07       .08       .37.2       .02	.03	•	90	ı	.10	90.	. 04	.10	. 08	.04	.01	.02
1 .28 .98 .66 .90 .96 .96 .96 .96 .98 .66 .90 .96 .96 .98 .66 .90 .96 .96 .96 .90 .96 .96 .90 .96 .90 .96 .90 .96 .90 .96 .90 .96 .90 .96 .90 .96 .90 .90 .90 .90 .90 .90 .90 .90 .90 .90	.20	•	28	.02	.38	.28	.14	.34	.34	.10	90.	Ξ.
1.28       .98       .66       .90       .96         3.38       1.20       1.00       1.112       1.06         3.56       1.34       .76       1.30       1.38         1.28       1.42       1.00       1.36       1.48         1.03       1.33       .50       1.18       1.26         1.03       1.14       .32       .76       1.15         1.03       1.14       .32       .76       1.15         1.14       .32       .76       1.15         1.14       .32       .76       1.15         1.14       .32       .76       1.15         1.14       .32       .76       .70         1.14       .30       .04       .06       .30         1.14       .30       .04       .06       .30         1.14       .02       -       .02       .02         1.14       .30       .04       .06       .30         1.14       .05       -       .02       .02         1.14       .05       .02       .02       .02         1.15       .06       .37.2       .02       .02         1	.50	•	22	.10	99.	. 52	. 52	99.	.62	.14	.18	.34
38       1.20       1.00       1.12       1.06         .56       1.34       .76       1.30       1.38         .66       1.42       1.00       1.36       1.48         1.28       1.42       .84       1.40       .61         1.08       1.33       .50       1.18       1.26         1.08       1.14       .32       .76       1.15         3       .52       .90       .20       .70       .70         3       .37       .62       .12       .16       .60         3       .14       .30       .04       .06       .30         .04       .02       -       .02       -       .02         .04       .08.6       378.0       549.6       637.2       66	96.	•	34	. 28	.98	99.	06.	96.	06.	.16	.50	.74
373.2 708.6 378.0 566 1.34	(1.16) <sup>a</sup>	•	46.	.33	1.20	1.00	1.12	1.06	1.14	.14	.70	1.00
0.66       1.42       1.00       1.36       1.48         1.28       1.42       .84       1.40       .61         0       1.08       1.33       .50       1.18       1.26         1       .79       1.14       .32       .76       1.15         3       .52       .90       .20       .20       .70         3       .37       .62       .12       .16       .60         3       .14       .30       .04       .06       .30         .04       .02       -       .02       .02         .04       .08       378.0       549.6       637.2       66	(1.30) <sup>a</sup>	•	28	.56	1.34	.76	1.30	1.38	1.28	.10	.84	06.
1.28       1.42       .84       1.40       .61         1.08       1.33       .50       1.18       1.26         1.79       1.14       .32       .76       1.15         3       .52       .90       .20       .70         3       .37       .62       .12       .16       .60         3       .14       .30       .04       .06       .30         .04       .02       -       .02       .02         .04       .02       -       .02       .02         .04       .05       .02       .02         .04       .05       .02       .02	1.40	•	30	99.	1.42	1.00	1.36	1.48	1.38	.14	.54	1.20
1.08       1.33       .50       1.18       1.26       1         5       .79       1.14       .32       .76       1.15       1         3       .52       .90       .20       .20       .70         3       .37       .62       .12       .16       .60         3       .14       .30       .04       .06       .30         .04       .02       -       .02       .02         -       -       -       -       -         373.2       708.6       378.0       549.6       637.2       663	1.40	•	32	1.28	1.42	.84	1.40	.61	1.36	.26	.62	1.30
5 . 79 1.14 . 32 . 76 1.15 1 3 . 52 . 90 . 20 . 20 . 70 3 . 14 . 30 . 04 . 06 . 30 . 04 . 02 02 . 04 . 02 02 373.2 708.6 378.0 549.6 637.2 663	1.28	•	20	1.08	1.33	.50	1.18	1.26	1.26	1.16	.65	1.20
3 52 90 20 70	1.12	•	26	.79	1.14	.32	.76	1.15	1.06	.74	1.06	1.00
373.2 708.6 378.0 549.6 637.2 663.	.70	•	13	.52	06.	.20	.20	.70	.82	.42	9/.	.78
373.2 708.6 378.0 549.6 637.2 663	.38	•	10	.37	.62	.12	.16	09.	.56	.18	.50	.48
.04 .0202 .02 373.2 708.6 378.0 549.6 637.2 663	.14	•	03	.14	.30	.04	90.	.30	.24	.14	.20	.20
373.2 708.6 378.0 549.6 637.2	.02	ı		.04	.02		. 02	.02	.02	.04	.04	.02
373.2 708.6 378.0 549.6 637.2		1		ı	1	1	1	ı	1	1	•	•
	635.4 17	œ			708.6	378.0	549.6	637.2	663.6	225.6	399.6	557.4

a value includes some estimated hourly values.

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974. (co	
May 19	

Hour					Day	Day of 1974					
Of Day	132	133	134	135	136	137	38	39	140	7	142
0500-0600	.02	(.10) <sup>a</sup>	2	9-	.05	01.	ı	0.	01.	· 0¢	80.
0000-0090	e grants	(.40) <sup>a</sup>	.40	.42	.36	8000	0	60.	.40	.20	8
0700-0800	.22	(.60) <sup>a</sup>	.70	.70	.64	99.	.44	9	99.	39	. 29
0800-0900	.23	(.70) <sup>a</sup>	96.	1.00	.92	.92	.58	.05	80,	.52	.80
0900-1000	.35	(.80)	1.16	1.20	2	kanan e funzan kunzan	.48	4	ince CA	.52	1.04
1000-1100	.20	.92	1.30	34	1.20	1.24	99.	.20	1.28	.92	1.12
1100-1200	71.	, 94	1.38	1.40	1.28	30	.50	91.	1.38	1.20	1.20
1200-1300	-	1.08	1.34	1.34	1.32	1.32	1.27	.26	1.38	1.33	1.30
1300-1400	60.	1.13	1.24	1.26	1.20	1.22	1.04	.32	1.30	1.30	1.28
1400-1500	.08	1.13	1.06	1.08	1.00	1.04	.64	.34	1.12	91.1	1.08
1500-1600	90.	.84	.82	.80	.80	.74	.62	34	.94	. 95	.76
1600-1700	.05	.55	.54	.54	.50	.50	.50	e	99.	99°	.54
1700-1800	.03	9.	.26	4	.12	.22	. 20	.24	.34	.34	.26
1800-1900	ı	.03	.04	.00	.04	90.	.04	.03	.10	.10	.08
1900-2000	1	1	1	1	a .	ı	ı	ı	ī	1	1
Total	106.8	564.6	679.2	683.4	633.0	648.6	424.2	162.0	9.669	577.8	624.0
draine actimated by	omos sopii	octimated		values							

avalue includes some estimated hourly values.

Table May 1974. (continued)

	150 151	.06 .04	.23 .16	.44	.60 .20	.36 .24	.13 .16	.40	.62 .18	1.16 (.22) <sup>a</sup>	.70 (.24) <sup>a</sup>	.46 .24	.32 .16	.28 .14	(90.) 80.	1	350.4 138.0
	149	10.	.04	91.	91.	.26	.26	.94	1.08	1.27	06.	.50	.30	.04	. 02	1	356.4
Day of 1974	148	.10	.34	.64	.92	1.16	1.16	1.32	1.31	1.10	1.20	1.00	.74	.34	.10	1	685.8
Day	147	10.	.03	.04	.12	.25	.24	.64	.84	. 56	.16	.20	.16	.26	90.		214.2
	146	.05	.22	.64	06.	1.10	68.	.56	1.06	.74	.80	.72	.46	.20	90.	1	504.0
	145	90.	.30	.39	.52	. 98	.95	. 65	1.24	.93	1.02	.91	. 58	.38	.10	1	540.6
	144	.08	.20	14	.04	.10	.46	1.19	1.31	1.26	.77	.85	.47	.34	.12	•	436.2
	143	.01	.05	.08	.05	.12	.21	.36	.48	. 53	.56	.58	.56	.40	.10	•	245.4
Hour	of Day	0200-0600	0020-0090	0700-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

avalue includes some estimated hourly values.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). June 1974. Table

Hour					Day of	of 1974					
of Day	152	153	154	155	156	157	158	159	160	161	162
0200-0600			.08	.10	90.	.10	.04	1	60.	.12	90.
0020-0090			.23	.34	.20	.38	.10	.05	.34	.32	.26
0080-0020			.38	09.	.51	.64	.12	.10	. 58	.40	. 58
0060-0080			.52	06.	.84	.92	.20	.36	.82	. 88	.92
0000-10060			.75	1.10	1.12	1.08	.38	.46	06.	1.08	1.16
1000-1100	ŀ	1	1.00	1.26	1.32	1.24	44	.50	88.	1.26	1.32
1100-1200	ATAO	∖TAŒ	1.26	1.26	1.22	1.24	.38	.40	1.18	1.34	1.42
1200-1300	ON	ON	1.26	1.34	1.42	1.28	.42	. 48	1.22	1.34	1.42
1300-1400			1.30	1.24	1.34	1.34	.38	.80	1.22	1.26	1.38
1400-1500			1.14	1.02	1.16	1.06	.20	1.01	1.10	1.12	1.18
1500-1600			.92	.94	1.00	.84	.24	.64	88.	.92	1.00
1600-1700			. 64	. 58	.70	99.	.12	.49	.62	. 68	.74
1700-1800			.38	.40	.40	.32	80.	.40	.34	. 38	.38
1800-1900			Ξ.	.12	.14	90.	.02	.10	.10	.10	.12
1900-2000			1	1	1	1	•	-	1	1	•
Total			598.2	678.0	685.8	9.699	187.2	347.4	616.2	672.0	716.4

Table June 1974. (continued)

Hour					Day	Day of 1974					
of Day	163	164	165	166	167	168	169	170	171	172	173
0200-0600	.12	.12	90.	90.	. 02	90.	.10	.10	01.	.10	.10
0020-0090	.27	.38	.25	.16	.28	.32	.20	.38	.34	.22	. 28
0700-0800	.40	.64	.33	. 58	. 28	.51	44	.60	09.	.56	. 56
0800-0080	.62	(.86) <sup>a</sup>	.83	.86	.24	1.00	06.	06.	(.82) <sup>a</sup>	.80	98.
0900-1000	. 68	1.04	1.05	.84	1.16	1.14	1.14	1.16	1.06	92.	88.
1000-1100	1.14	1.28	1.22	1.19	.36	1.36	1.08	1.12	1.22	1.12	.64
1100-1200	1.40	1.34	1.33	1.32	.22	1.35	.70	1.26	1.30	.61	.74
1200-1300	1.20	1.40	1.30	1.34	.36	1.12	1.10	1.27	96.	. 52	.92
1300-1400	1.32	1.28	1.34	1.28	.70	1.02	1.02	1.32	.52	. 38	1.07
1400-1500	92.	1.14	1.14	1.14	92.	.84	1.22	1.00	. 52	. 38	.70
1500-1600	.32	.92	88.	. 94	. 92	.72	. 46	.90	.26	. 56	.36
1600-1700	.14	99.	09.	.68	.80	. 68	99.	.64	.18	. 54	.20
1700-1800	.26	.34	.38	.38	.34	. 28	.40	.32	.20	.10	.12
1800-1900	.14	.14	.12	.14	.12	.12	.12	.12	j.	.02	.05
1900-2000	1	•	•	-	•	1	•	-	1	•	
Total	526.2	692.4	648.6	654.6	393.6	631.2	572.4	665.4	484.8	400.2	448.8

avalue includes some estimated hourly values.

June 1974. (continued)

	181	90.	.30	.56	.80	1.04	1.16	1.28	1.30	1.26	1.10	06.	.64	.38	.12	•	654.0
	180	.04	14	.50	.86	09.	. 88	1.28	1.05	.72	.85	. 55	. 52	.30	90.	1	501.0
Day of 1974	179	.04	.08	.08	.14	.16	8 .	.20	.18	.16	.12	.14	.12	.08	.04	1	103.2
Day c	178	.02	.14	.32	.36		ı	.72	.34	.24	.48	1	.48	. 28	90.	1	206.4
	177	90.	.12	.14	.42	09.	.26	.46	.54	.74	1.06	.56	09.	.10	ı	1	339.6
	176	.08	.26	.20	.42	.30	. 53	1.06	99.	1.01	1.10	. 52	.34	.24	.10	1	343.2
	175	· 04	.14	.26	.46	. 50	1.02	.92	1.14	1.11	.92	. 58	.32	.04		1	447.0
	174	.02	-	.24	.20	.16	.18	.08	.10	.10	.07	.08	.04	.02	.01	1	84.6
Hour	of Day	0500-0600	0020-0090	0700-0800	0060-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm<sup>2</sup> day). July 1974. Table

	192	90.	60.	. 60	.91	1.01	1.41	1.49	1.42	1.38	1.21	76.	.72	. 44	.16	. 02	713.4
	191	90.	.25	.49	77.	76.	1.11	1.16	1.12	76.	76.	92.	.33	.19	.04	10.	552.0
	190	.07	.24	.45	.71	66°	1.14	1.17	1.16	1.15	1.02	.80	09.	.36	.12	.01	599.4
	189	.10	.34	09.	1.10	1.09	1.15	1.23	(1.23) <sup>a</sup>	1.23	1.07	88.	.64	.38	.14	.01	671.4
	188	90.	.16	.42	.67	1.00	1.22	1.35	1.33	1.31	1.08	68.	.62	.34	.12	1	634.2
of 1974	187	.07	.16	.26	.38	.46	.52	.49	.64	.57	. 53	.25	.14	.12	90.	1	279.0
Day	186	1	60.	.29	.44	.79	1.06	1.04	1.08	.75	.43	.45	.47	.10	.01	1	420.0
	185	60.	.32	09.	.83	1.03	1.19	1.27	1.30	1.19	1.03	.85	.61	.37	.13	1	643.6
	184	70.	.33	.56	.80	1.00	1.22	1.31	1.29	(1.10) <sup>a</sup>	(.95) <sup>a</sup>	98.	.63	.36	.12	1	0.989
	183	н.	. 33	.62	06.	1.12	1.25	1.34	1.38	1.26	1.12	.92	.63	.35	Ξ.	1	686.4
	182	.03	.18	.31	.33	.45	1.14	1.26	1.35	.70	.82	.33	.23	.38	.12	•	457.8
Hour	of Day	0200-0600	0020-0090	0700-0800	0800-0900	0000-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

avalue includes some estimated hourly values.

July 1974. (continued)

	1			Day	Day of 1974					
193 194 195 196		196		197	198	199	200	201	202	203
70. 01. 01. 01.	•	.07		.05	80.	.04	.02	60.	88.	.08
.36 .30 .30 .26		.2	<b>10</b>	.14	.32	.13	.03	.32	.19	.32
. 64 . 59 . 57			. 59	.30	.61	.20	.14	09.	. 53	. 58
. 90 . 83 . 84		•	.32	.47	88.	(.45) <sup>a</sup>	.17	.87	.86	.85
1.14 1.05 1.03	1.03	•	98.	.84	1.11	(.78) <sup>a</sup>	.50	1.11	1.13	1.08
1.31 1.24 1.24		•	06.	1.12	1.30	(1.10) <sup>a</sup>	.70	1.30	1.32	1.24
1.30 1.31 1.32		•	.95	1.22	1.33	1.17	96.	1.03	1.43	1.36
1.42 1.19 1.28 1.	-		.20	1.25	1.39	1.02	.84	(1.06) <sup>a</sup>	1.29	1.38
1.21 1.24 1.21 1.21		1.2	_	1.26	1.32	.61	1.23	1.37	1.34	1.34
1.11 1.12 1.09 .80		ω̈́	0	. 93	1.15	.86	(1.00)	1.21	1.19	1.14
7.) 78. 67. 68.		(.7	(.74) <sup>a</sup>	.63	. 94	.78	(.70) <sup>a</sup>	1.00	. 98	.94
79. 79. 79. 95.		9.	7	.67	.67	09.	.24	.74	69.	.69
.34 .38 .32 .33		ε.	m	.40	.39	.29	.22	.40	.41	.45
.15 .13 .1	.13	-	_	.14	Ę	. 05	Ę.	.13	.14	.14
- 10. 10. 10.		'		1	.01	.01	1	1	.01	•
684.0 656.4 658.8 540.6		540.6		565.2	0.969	785.4	411.6	673.8	695.4	695.4

a value includes some estimated hourly values.

July 1974. (continued)

	2						,	ATAO	ON								
	212							47.40	014							1	
	211	.03	Ξ.	.30			,	ATAO	ON							ı	
	210	.03	.21	.32	.73	. 94	1.14	1.24	1.37	1.19	1.04	.82	.56	.27	90.	1	595.2
Day of 1974	509	.05	.22	.50	.77	1.03	1.18	1.27	1.29	1.22	1.06	.85	. 59	.3	.07	1	624.6
Day	208	.04	91.	.32	.51	.97	1.15	1.05	1.01	1.00	1.12	.79	.60	.32	60.	1	547.8
	207	.03	E.	.22	.30	.14	.10	.30	.60	1.00	.68	.46	.22	.13	.03	1	259.2
	206	.03	80.	.16	.16	.24	. 28	.20	(.30) <sup>a</sup>	.40	.75	.70	.29	.18	.05	ı	229.2
	205	.02	. 02	.07	.17	.15	.20	.25	8.	.17	.21	.63	.41	.17	-	.01	166.2
	204	60.	.23	.43	.50	.63	.48	.82	. 93	.55	.42	.23	60.	.10	.04	1	332.4
Hour	of Day	0500-0600	0000-0090	0700-0800	0800-0000	0000-10060	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

a value includes some estimated hourly values.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour)

anc:	d Daily T	and Daily Totals (g cal/cm <sup>-</sup>	cal/cm² da	day). Sept	September 1974.	74.					
1	244	245	246	247	Day 6	Day of 1974 .8 249	250	251	252	253	254
0500-0600									(.01) <sup>a</sup>	.01	1
0000-0090									(.16) <sup>a</sup>	.07	.00
0080-0020									(.37) <sup>a</sup>	91.	.07
0060-0080									.61	<u>.</u>	.41
0001-0060		,							.65	(.28) <sup>a</sup>	.61
1000-1100			,	,	,	,	,	,	1.08	.29	1.08
1100-1200	ATAG	ATAO	ATAO	ATAO	ATAG	ATAO	∆TAŒ	ΑΤΑΟ	1.17	.47	.94
1200-1300	ON	ON	ON	ON	ON	011	ON	ON	1.22	68.	1.24
1300-1400									1.07	.62	.47
1400-1500									.38	.65	.45
1500-1600									.23	. 68	.43
1600-1700									.19	.42	.38
1700-1800									.08	.13	.12
1800-1900									10.	.01	-1
1900-2000						o()				ı	1
Total									433.8	299.4	372.6

<sup>a</sup>value includes some estimated hourly values.

September 1974. (continued)

Hour					Day o	Day of 1974					
of Day	255	256	257	258	259	260	261	262	263	264	265
0200-0600	1	.01	ı	.01	.01	ı	ı	ı	ı	1	1
0020-0090	.03	.13	.03	.15	.13	.03	.11	.07	.03	90.	.03
0700-0800	60.	.35	.12	.37	.21	.20	.31	.27	60.	.21	.23
0800-0080	.20	.68	.32	.67	69.	. 55	.64	.43	.17	.40	.65
0900-1000	.75	96.	.79	.79	(.88) <sup>a</sup>	.59	98.	88	. 49	.83	88.
1000-1100	1.07	1.03	.84	(.55) <sup>a</sup>	1.05	1.04	1.03	.73	1.06	88.	96.
1100-1200	1.12		.80	(.61) <sup>a</sup>	1.17	1.08	.84	1.08	1.14	92.	99.
1200-1300	1.13	1.11	.78	(.68) <sup>a</sup>	96.	.38	.78	1.04	1.14	.61	1.30
1300-1400	1.07	1.15	69.	(.62) <sup>a</sup>	1.00	.41	.62	66.	. 98	.74	.85
1400-1500	06.	1.07	.43	(.58) <sup>a</sup>	.62	.80	.84	.82	.80	.54	.33
1500-1600	. 54	.67	.33	. 53	09.	.54	.63	.62	.52	. 28	91.
1600-1700	.39	.43	.26	.20	.44	.30	.36	.38	.39	.13	. 23
1700-1800	.12	.10	.20	.10	90°	.15	60.	.13	.08	0.	.08
1800-1900	1	è	.01	.00	.01	.00	.01	.00	.01	,	.01
1900-2000	1	1	1		1	-	•	•	1	-	-
Total	444.6	528.0	336.0	352.2	469.8	364.8	427.2	447.0	414.0	325.8	382.2

avalue includes some estimated hourly values.

September 1974. (continued)

Hour					Day	Day of 1974				
of Day	592	267	268	269	270	271	272	273		
0200-0600	1	ı	ı	ı	i	ı	1	ı		
0020-0090	.05	Ë.	.03	60.	.10	.02	.07	11.		
0700-0800	.30	.38	.20	8	.35	90.		.39		
0800-0080	.67	69.	99.	.59	.57	.24		.67		
0001-0060	6	. 92	.94	.89	.86	4		.89		
1000-1100	1.09	1.09	1.06	.95	1.00	.04		1.04		
1100-1200	1.20	<u> </u>		1.04	1.09	.13		1.12		
1200-1300	1.20	1.18	1.14	1.01	1.08	.51		1.11		
1300-1400	1.14	1.09	1.01	.68	96.	.25		1.00		
1400-1500	.71	06.	.85	.68	.59	90.		.83		
1500-1600	.71	69.	. 58	.32	.51	Ε.	.56	.41		
1600-1700	.41	.42	.31	.22	.26	.24	.22	.13		
1700-1800	.11	.13	.07	.04	.05	.03	.05	. 02		
1800-1900	.01	.01	1	1		1		ı		
1900-2000	1	•	-	,	1	8	1	1		
Total	510.6	527.4	480.0	401.4	445.2	109.8		462.0		

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (g cal/cm² day). October 1974. Table

Hour					Day	of 1974					
of Day	274	275	276	277	278	279	280	281	282	283	284
0200-0600	ı	•	ı	ı	1	ı	ı	1	•		ı
0600-0700	(.10) <sup>a</sup>	ı	.08	.10	.03	.08	.08	.08	. 08	90.	.08
0700-0800	(°30)	.08	.36	.36	.30	.32	.30	.34	.30	. 28	.30
0800-0080	(.60) <sup>a</sup>	.64	99.	.64	.58	.60	.64	.60	. 58	. 52	. 58
0000-1000	(.90) <sup>a</sup>	.06	06.	.88	.82	.82	09.	98.	. 58	9/.	92.
1000-1100	1.06	1.96	1.00	1.04	. 98	. 93	1.02	1.02	.56	.92	98.
1100-1200	1.14	1.00	1.22	1.10	1.04	1.04	96.	1.06	.86	. 98	.92
1200-1300	1.16	1.16	1.09	1,08	1.02	1.04	1.00	1.04	. 98	.94	06.
1300-1400	1.12	1.06	.72	.98	.92	.92	06.	.92	.84	.85	.80
1400-1500	98.	99.	07.	.78	.74	·74	.62	.74	.70	.70	.62
1500-1600	09.	.74	. 58	. 54	.50	.50	.30	.52	.46	.46	.42
1600-1700	.30	.36	.30	. 28	.24	.26	.12	. 28	.22	.20	. 18
1700-1800	90.	.04	. 02	.02	.02	.02	.02	. 02	.02	.00	ı
1800-1900	1	1	1	1	•	ı	ı	1		•	1
1900-2000	1	1	1	•	-	1	1	1		-	1
Total	492.0	462.0	434.4	463.0	434.4	439.2	393.6	448.8	370.8	401.4	385.2

a value includes some estimated hourly values.

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Hour					Day	Day of 1974					
of Day	285	286	287	288	289	290	291	292	293	294	295
0200-0600	ı	ı	1	1	ı		ı	1			ı
0000-0090		ı		ı	ı	.03	.02	.00	.02	.04	.02
0700-0800	.13	.02	ı	.18	ı	.28	.21	.21	.21	.26	.25
0800-0080	.37	.21	.08	.27	.04	.50	. 56	.34	.53	.54	.52
0900-1000	. 59	.32	.12	.44	.15	.76	.76	77.	.72	.76	.74
1000-1100	. 68	. 48	.17	.28	.12	.93	.95	.91	.84	.92	.91
1100-1200	88.	.85	.23	69.	.08	66.	1.10	. 98	88.	66.	. 98
1200-1300	.64	.80	.65	.55	.15	.98	.80	.95	.49	76.	76.
1300-1400	.45	.74	99.	.48	.19	.87	.64	.86	.70	.87	.85
1400-1500	.25	.55	.44	.34	.10	.47	.53	.75	.53	. 68	.67
1500-1600	. 08	.23	.33	.17	.07	.23	.36	.32	8.	44	. 44
1600-1700	. 02	ı	.14	.07	.04	.01	.12	.20	80.	.20	.16
1700-1800	ı	.00	ı	ı	ı		1	ı	.00	.02	ı
1800-1900	1	ı	٠	ı	ı		1	ı		٠	ı
1900-2000	•	•	•	•	1	ı	1	ı		•	-
Total	245.4	252.6	169.2	208.2	56.4	361.8	363.0	378.0	310.2	401.4	390.6

Table October 1974. (continued)

	304	1	1	.13	.37	.60	.74	.80	.79	.68	.52	.30	.10	1	1	1	301.8
	303	ı	1	.03	.12	.25	.55	.47	.36	.67	.52	.28	.07	1		1	199.2
	302	1	1	.13	.34	.57	.38	.41	09.	.64	.48	.26	90.	ı	1	1	232.2
Day of 1974	301	ı	.01	.12	.40	.62	.85	.67	.76	. 53	.38	91.	.03	1		1	273.6
Day	300	ı	.01	. 23	.47	69.	.82	16.	06.	.82	99.	.41	.15	1	•	1	364.2
	299	1	.01	.12	.34	. 52	.74	.85	.78	.73	.53		.12	1	1	1	303.0
	298	. 1	.01	.13	.15	.43	.74	.82	.83	.45	.21	.07	.00	r	,	1	231.0
	297	1	.02	.22	.47	.70	98.	.92	06.	.78	.62	.18	E.			1	246.8
	296	1	.01	.26	.48	.70	.85	.88	.83	.40	.19	.16	.04	ı	1	1	288.0
Hour	of Day	0200-0600	000-0090	0700-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

244.2

300.0

309.6

316.2

174.6

308.4

121.2

288.0

286.8

268.8

262.2

Total

1900-2000

.29 .05 .09 .22 .40 .48 . 59 .52 6 .71 .71 315 Average Hourly Values (g cal/cm<sup>2</sup> hour) 69. 92. .84 .82 .52 .04 .34 .62 .21 0. 314 8. .40 .63 .83 80 69. .52 .29 .05 .77 313 90. . 18 .63 .78 .84 .82 .72 . 53 .30 41 312 20 90. .03 90. 62 .56 44 .24 .33 37 311 Incident Total White Light Irradiance at Dock (map 2). .35 98. .30 .58 .80 .83 .04 Day of 1974 .71 .51 310 and Daily Totals (g cal/cm<sup>2</sup> day). November 1974. .03 .04 .04 60. .24 .52 .48 .24 90. .27 5 309 01. .33 .59 .80 80 .73 .45 80. 64 .28 308 .29 .79 01. . 55 .70 .68 .55 35 80. .67 0. 307 .79 . 55 .80 8 .70 .62 .37 .27 0. 306 .60 .14 .77 .77 .67 .37 5 0. 3 .61 305 1800-1900 0500-0600 0020-0090 0700-0800 0800-0080 0900-1000 1000-1100 1100-1200 1200-1300 1300-1400 1400-1500 1500-1600 1600-1700 1700-1800 Hour Day Table 0f

November 1974. (continued)

Table

Hour					Dav c	Dav of 1974					
of Day	316	317	318	319	320	321	322	323	324	325	326
0200-0600	ı	ı	ı	1	ı	1	1	ı	ı	î	1
0020-0090	ı	ı	.00	ı	.01	ı	ı	ı	ı	ı	ı
0700-0800	.02	.12	.10	90.	.21	.02	.07	.04	.02	.04	E.
1800-0900	.04	.39	.19	.33	.36	.08	.13	.10	.04	90.	.34
0000-1000	.07	. 69	.46	09.	.25	.10	.32	.17	.07	.12	. 54
1000-1100	. 08	.74	.74	.76	.64	F.	.41	.24	90.	.18	.70
1100-1200	.07	.84	.75	.80	.79	.19	.38	.43	.08	.15	.78
1200-1300	.04	.93	.83	.78	.76	.65	.34	.50	90.	.21	.77
1300-1400	.05	.57	.65	99.	.63	.62	. 28	. 44	.05	.24	.67
1400-1500	.03	.39	.48	.49	.48	.47	.17	.46	.02	.13	.51
1500-1600	.01	.26	.22	.26	. 28	.26	60.	-	.03	.04	.29
1600-1700	ı	90.	.03	90.	.07	.05	.03	.03	.01	.01	80.
1700-1800		•	ı	1	ı	ı	1	ı	ľ	1	ı
1800-1900	ı	•	ı	ı	ı	ı	ı		ı	ē	1
1900-2000	•	•	•	•	•	1	-	-	•	1	-
Total	24.6	293.4	267.6	288.0	268.8	153.0	133.2	151.2	26.4	70.8	287.4

334 ATAG ON 333 ATAG ON Day of 1974 332 ATAG ON 331 ATAG ON (.04)<sup>a</sup> (.24)<sup>a</sup> (.48)<sup>a</sup> .30 .53 69. 9/. 9/. .67 .07 330 272.4 .05 .20 .30 .39 43 .04 .02 November 1974. (continued) 0. .0 329 93.6 60. .48 .64 .72 .63 .27 .47 .27 .04 .71 259.2 328 .48 .26 90. .37 .67 .74 .72 .63 .51 274.2 327 0500-0600 0600-0700 0700-0800 0800-0000 0900-1000 1000-1100 1100-1200 1200-1300 1300-1400 1400-1500 1500-1600 1600-1700 1700-1800 1800-1900 1900-2000 Total Hour of Day Table

<sup>a</sup>value includes some estimated hourly values.

Incident Total White Light Irradiance at Dock (map 2). Average Hourly Values (g cal/cm<sup>2</sup> hour) and Daily Totals (q cal/cm<sup>2</sup> day). December 1974. Table

	345	1	1	60.	.34	.49	.57	.64	.67	.45	.29	.10	.01	1		1	219.0
	344	ı	ı	80.	.32	.50	.61	.38	.40	.26	.23	.13	.02	1	1	1	175.8
	343	1	ı	80.	.32	.49	.61	.64	.21	.23	.14	-	.02	1		1	171.0
	342	1	1	ı	1	.10	.19	.28	.43	.35	.40	.15	.02	1		t	115.2
	341		1	.03	Ξ.	.20	.27	.51	.39	.26	.18	.10	.01	1	ı	ı	123.6
Day of 1974	340	1	ı	Ξ.	.33	.51	.62	69.	99.	(.56) <sup>a</sup>	(.36) <sup>a</sup>	(.18) <sup>a</sup>	.02	ı	ī	ı	242.4
Day o	339	1	ı	.10	.31	.51	.51	.64	. 55	.60	.40	.21	.03	1	1	1	231.6
	338	1	1	.10	.32	.52	99.	.70	69.	09.	.41	.18	.02	i	1	ı	252.0
	337	ı	1	.05	.30	.40	.52	. 57	99.	.57	.40	.17	.02			1	219.6
	336	l	ı	(.01) <sup>a</sup>	(.03) <sup>a</sup>	.04	.04	.05	Ξ.	.10	90°	.02	ı		1	1	27.6
	335	I						ATAC	I ON							ı	
Hour	of Day	0200-0600	0000-0090	0700-0800	0800-0080	0000-10060	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total

avalue includes some estimated hourly values.

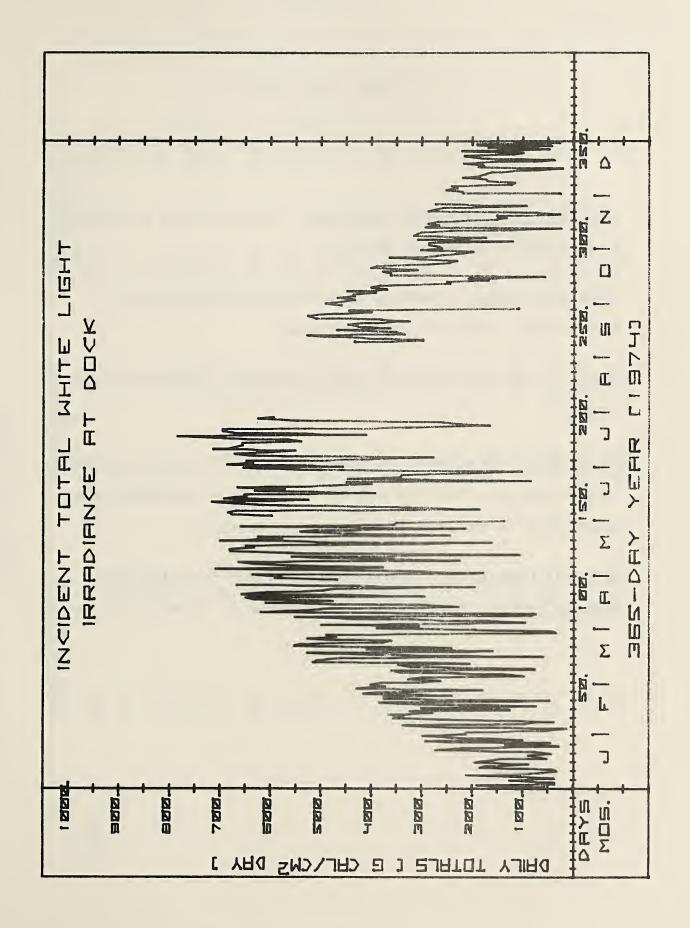
December 1974. (continued)

	5 356	ı	i	10. 10	04 .22	. 06	.06 .22	12 .64	.14 .46	.12 .54	.08 .38	.01 .16	ı		1	1	184.2
	354 355	1	1	). 90.	.16	.36	.62	09.	.40	.31	91.	). 90.	1	1	ı	- 1	7 88 8 89L
	353	1	1	.02	.17	.42	.63	.62	.60	.60	.38	.14	.04	ı	ı	1	31 2 216
	352	1	1	.05	.25	.39	.37	.44	.32	.56	.44	.15	ı	ı	ı	1	178.2
Day of 1974	351		ı	.07	.24	.29	.59	.63	.62	. 52	Ε.	.07	ı	ı	I	ı	1001
Day	350	1	1	1	1	.00	.05	.08	.08	90.	90.	.02	ı	ı	I	1	21 6
	349	1	Ü	. 02	60°	.22	.29	.27	. 28	.20	60.	.03	1	ı	ı	ı	80 4
	348	ı	ı	.04	.25	.42	.56	.52	.63	.20	.08	.01	ı	ı	ı	ı	162 6
	347	1	1	.07	.26	.30	.26	.46	99°	.47	.31	.12	ı	ı	ı	ı	174.6
	346	ı	1	.01	.00	.42	.58	.61	. 58	.46	.26	.10	ı	ı	ı	ı	186.6
Hour	of Day	0500-0600	0600-0700	0700-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	To+01

December 1974. (continued)

Table

	365	1	ı	.01	90.	90.	90.	.14	.08	.04	.02	ı	ı	ı	ı	1	28.2
	364	ı	ı	ı	.07	.20	. 54	.64	. 63	. 54	.36	91.	.04	ı	ı	1	190.8
	363	ı	ı	ı	.02	.04	.14	.18	.12	.10	60.	. 04	ı	ı	ı	•	43.8
Day of 1974	362	l	ı	1	.04	.14	.32	.62	.62	. 52	88.	.16	.01	1		1	168.6
Day	361	ı	ı	1	90.	.16	.16	.12	.14	.08	.05	.04	1	11	1	1	48.6
	360	ı	ı	. 04	.24	.44	. 58	. 68	. 59	. 54	.40	.16	.02	ı)	0	1	221.4
	359	1		ı	. 02	90.	90.	90.	.39	. 50	.40	.16	.02	17	17	•	100.2
	358	ı	•	.02	.10	.24	.62	.26	.34	.22	.14	90.	.01	•	•	1	120.6
	357	ı		90.	.26	.44	. 56	.62	09.	. 52	.38	.16	.01	1	ı	•	216.6
Hour	of Day	0200-0600	0020-0090	0700-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	Total



## Weather Station Data (map 2)

<u>% Relative Humidity and Air Temperature</u> - Measured using a Hygrothermograph - Belfort Instrument Company.

<u>Barometric Pressure</u> - Measured using an aneroid type barometer. Microbargraph - Belfort Instrument Company.

<u>Rainfall</u> - Measured using a weighing rain gauge - Belfort Instrument Company.

<u>Evaporation</u> - Measurements are taken of the amount of water evaporating from an open pan. Wind run adjacent to the pan and maximum/minimum temperatures of the water in the pan were also taken.

<u>Principal Investigator</u>: Daniel Higman, Smithsonian Institution.

<u>Research Funding</u>: Smithsonian Institution and U. S. Geological Survey.

Weather Station Data

	Relative	Relative Humidity	Air Tem	Air Temperature	Barometri	Barometric Pressure
Day of 1974	Max.	% Min.	Max.	c Min.	mm of Max.	mm of Mercury Min.
1	86	53	7.2	0	771	758
2	70	50	:	-3.3	776	772
8	94	54	1.1	-0.6	769	762
4	97	99	2.2	-2.8	767	762
വ	92	62	0	-3,3	768	762
9	93	72	1.7	-0.6	762	757
7	86	99	6.7	-1.7	768	751
$\infty$	74	39	9.0	-2.8	177	763
<b>o</b>	96	20	1.7	-2.8	771	760
10	66	84	-:-	-0.6	797	759
Ε	66	78	5.0	1.1	760	754
12	86	42	2.2	-4.4	773	760
13	06	40	3.3	4.6-	777	773
14	92	46	9.0	-10.0	775	763
15	96	52	10.0	-4.4	762	753
16	98	48	16.0	-2.8	758	751

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	Relative	Relative Humdity	Air Tem	perature	Barometri	Barometric Pressure
Day of 1974	Max.	% Min.	Max.	O'C Max. Min.	mm of Max.	mm of Mercury Min.
17	85	50	13.3	1.1	770	754
18	82	56	2.2	-2.8	773	764
19	94	64	12.2	2.2	764	759
20	80	09	4.4	2.2	767	764
21	86	80	10.0	1.7	764	755
22	94	44	15.0	1.1	763	760
23	96	44	20.6	0	762	757
24	86	09	1. [	2.2	692	763
25	86	74	6.7	0	692	797
56	100	96	4.4	-1.1	692	760
27	86	42	21.7	5.0	761	755
28	97	89	12.2	9.0	760	750
59	06	48	12.2	5.6	762	752
30	86	. 46	13.3	9.0	192	759
33	100	34	17.8	-1.7	760	751
32	92	40	8.9	-2.8	764	757

(Continued)

Day of	Relative	elative Humidity %	Air Tem 0	Air Temperature o C	Barometri	Barometric Pressure
1974	Max.	Min.	Max.	Min.	Max.	Min.
33	96	89	6.1	0	759	751
34	96	84	9.0-	-2.2	757	755
35	98	52	1.7	-6.1	763	756
36	72	36	0	-7.8	768	160
37	97	45	0	-8.3	768	757
38	66	09	3.9	0	759	753
39	92	09	9.0-	-5.0	759	752
40	94	46	9.0-	-12.2	762	754
41	92	46	1.1	-12.2	764	756
42	92	38	1.1	-5.6	760	754
43	92	37	8.9	-5.6	752	759
44	94	38	17.8	-1.1	759	753
45	86	48	9.4	1.1	764	758
46	92	48	1.7	-5.6	768	764
47	86	58	1.1	-8.9	768	750
48	86	40	6.7	-1.7	755	749

Weather Station Data

Dav of	Relative Humidity %	umidity	Air Te	Air Temperature O C	Barometr mm of	Barometric Pressure
1974	Max.	Min.	Max.	Min.	Max.	Min.
49	98	38	5.6	-6.7	761	755
50	96	76	9.4	0	758	743
51	96	35	11.1	0	764	743
52	96	40	8.9	-5.0	770	762
53	86	40	20.6	6.1	762	740
54	92	34	10.0	-2.8	764	745
55	92	46	6.7	-6.7	992	758
56	96	46	2.2	-3.3	763	759
57	9/	36	2.8	-6.7	770	763
58	94	40	4.4	-10.0	772	768
59	94	34	15.0	-5.0	768	758
09	78	40	13.3	2.8	762	756
19	100	29	10.0	9.0-	764	758
62	101	62	15.6	2.2	762	757
63	84	40	25.0	10.0	759	753
64	80	46	18.9	10.0	759	752

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	7012	1	
	7012	1	

	Relative Humidity	umidity	Air Ter	Air Temperature	Barometric Pressure	Pressure
Day of 1974	Max.	Min.	Max.	J.C Min.	mm of Max.	Mercury Min.
65	86	20	12.2	2.2	764	759
99	100	52	23.9	3.3	761	758
29	86	40	16.7	7.8	764	760
89	86	64	7.2	4.4	992	760
69	86	32	15.6	2.8	768	757
70	97	36	7.8	-3.3	692	762
71	86	44	7.8	1.1	761	757
72	70	35	5.6	4.4	092	757
73	80	34	10.6	-2.8	764	760
74	96	34	11.7	-5.6	767	760
75	86	54	13.3	4.4	756	749
76	99	35	8.9	4.4	752	749
77	80	32	12.2	0	756	752
78	94	56	13.3	9.0-	754	749
79	98	50	10.0	2.2	760	754
80	100	48	14.4	5.6	759	743

Weather Station Data

9	Relative Hu	midity	Air Temperature	erature	Barometric Pressure	ressure
Day or 1974	Max.	Min.	Max.	o Min.	Max. Min.	cury Min.
81 70 28	70	28	11.11	-1.7	764	757
82	97	49	15.6	-1.1	764	756
83	94	56	13.3	2.8	797	753
84	82	21	2.2	-4.4	774	767
85	88	21	14.4	-6.7	768	759
86	84	40	11.7	3.9	768	762
87	95	32	13.3	1.1	762	759
88	06	57	7.2	2.8	762	751
89	89	36	ı	,	751	740
06	ı	1	ı	-	742	755
91	89	36	13.3	6.7	759	754
92	85	18	24.4	5.0	758	750
93	88	20	22.2	5.0	760	755
94	87	49	23.3	14.4	755	751
95	06	42	20.0	10.0	755	751
96	65	33	9.4	5.6	761	753

(Continued)

			ì			
Day of 1974	Relative Humidity %	ıldıty	Alr lemperature O C	ature	barometric Pressure mm of Mercury	ssure
26	92	21	15.6	-3.3	764	759
98	10	38	13.9	10.0	759	753
66	06	09	heres e heres	2.8	756	749
100	85	14	12.2	9.0	767	757
101	06	26	15.6	-2.2	772	167
102	85	33	24.4	11.7	768	761
103	88	50	23.3	12.2	761	758
104	16	51	23.3	9.4	759	748
105	29	27	21.7	10.6	756	748
106	83	31	15.6	5.0	762	756
107	92	21	17.8	1.1	764	761
108	87	20	22.2	4.4	761	758
109	86	36	16.7	1.7	766	758
110	86	24	15.6	-1.7	177	992
111	86	32	23.3	3.9	769	762
112	80	40	26.7	15.0	762	753

(Continued) Weather Station Data

	Relative Humidity	idity	Air Temner	ature	Rarometric Pressure	SSIINE
Day of 1974		Min.	O C Min.	Min.	mm of Mercury Max. Min.	رزخ Min.
113	94	24	20.0	6.7	756	750
114	70	50	12.2	6.7	762	756
115	66	28	20.0	7.2	765	762
116	88	24	22.2	8.9	764	761
117	86	22	20.2	4.4	768	763
118	86	36	22.2	5.6	769	762
119	94	24	32.8	14.4	762	758
120	96	32	30.0	12.8	759	.753
121	84	56	23.9	13.3	762	753
122	86	44	12.8	8.9	766	759
123	86	54	21.7	8.9	759	752
124	98	24	18.9	7.2	760	755
125	, 96	34	12.8	7.8	762	757
126	96	44	16.7	6.1	757	751
127	86	30	14.4	1.1	761	756
128	86	34	16.7	9.0-	763	760

Weather Station Data

Day of	Relative	Relative Humidity	Air Te	Air Temperature	Barometric Pressure	Pressure
1974	Max.	/o Min.	Max.	Min.	Max.	IIIII OI METCURY
129	96	69	16.7	12.2	760	756
130	06	54	22.2	12.8	759	755
131	92	28	20.0	11.11	761	757
132	96	20	18.3	7.2	757	742
133	96	36	18.3	8.9	760	750
134	96	20	21.1	7.2	761	758
135	89	44	27.8	16.7	758	755
136	96	40	28.9	16.7	762	758
137	94	44	32.8	18.9	759	756
138	80	26	21.7	11.11	762	758
139	96	62	20.0	10.0	764	761
140	86	44	21.1	7.2	767	764
141	96	36	23.3	7.2	766	762
142	94	48	30.0	11.7	762	755
143	95	26	23.9	15.6	757	753
144	96	20	26.7	13.9	759	754

Day of	Relative Humidity	umidity	Air Temperature O	erature	Barometric Pressure	ssure
1974	Max.	Min.	Max.	Min.	Max. Min.	Min.
145	97	36	21.1	11.1	759	757
146	06	36	21.1	10.6	759	758
147	94	50	17.8	11.1	759	756
148	86	28	22.2	7.8	762	759
149	93	52	26.7	16.7	759	751
150	95	09	24.4	17.8	758	751
151	94	72	22.2	16.7	760	756
152	93	72	23.9	17.2	760	757
153	94	36	16.7	14.4	761	759
154	92	50	22.2	14.4	764	19/
155	96	42	25.0	10.0	992	76.4
156	96	42	25.6	10.6	767	763
157	96	46	31.7	9.4	764	762
158	94	74	19.4	15.6	763	762
159	95	63	25.0	17.8	764	092
160	95	59	27.8	14.4	760	756

(Continued)

rometric mm of Mercury Min. Barometric Pressure Max. 20.0 15.6 13.9 12.2 12.2 18.9 15.0 Air Temperature 9.4 16.7 15.6 19.4 13.3 19.4 14.4 14.4 21.1 Min. 25.0 25.6 25.6 25.6 27.8 30.0 29.4 30.0 20.0 31.1 26.1 26.1 Relative Humidity Max. Day of 1974 

	Relative Himidity	niditv	Air Tempe	241170	Ranometric Dressing	ovii o
Day of		5	000	5	mm of Mercury	
1974	Max.	Min.	Max.	Min.	Max.	Min.
177	96	55	21.7	14.4	761	757
178	96	62	21.1	14.4	762	19/
179	96	78	17.2	13.3	762	759
180	96	26	23.3	12.8	762	760
181	96	40	28.3	12.8	761	755
182	92	44	30.0	20.6	759	755
183	94	36	30.0	15.0	762	759
184	94	44	33.3	18.9	762	760
185	94	44	31.7	21.1	192	758
186	92	58	30.0	22.2	160	758
187	94	99	26.7	20.0	762	760
188	94	38	30.6	18.3	763	761
189	94	36	34.4	17.8	761	759
190	92	36	35.0	18.9	759	756
191	92	44	33.9	20.0	756	753
192	89	38	31.7	14.4	760	754

Weather Station Data

	Relative Humidity	idity	Air Temperature	ature	Barometric Pressure	sure
Day of 1974	Max.	Min.	Max.	Min.	mm of Mercury Max. Min.	Y. Min.
193	86	30	27.8	11.1	762	760
194	96	34	27.8	12.8	763	092
195	94	34	33.3	14.4	758	755
196	89	46	32.2	22.2	755	753
197	94	40	28.9	17.8	762	755
198	96	34	27.8	12.8	992	762
199	92	52	31.1	16.1	992	760
200	94	45	31.7	21.7	757	755
201	06	34	26.7	13.9	092	757
202	97	32	26.7	11.7	191	160
203	97	34	27.8	12.2	761	760
204	94	50	24.4	13.9	762	761
205	92	89	23.9	17.2	761	092
206	98	09	23.3	15.6	762	092
207	06	99	25.6	20.6	762	760
208	94	20	29.4	18.9	760	758

Weather Station Data

	Relative Humdiity	umdiity	Air Temperature	rature	Barometric Pressure	ssure
Day of 1974	Max.	Min.	Max.	Min.	mm of Mercury Max.	ry Min.
209	94	50	30.0	17.2	7 59	756
210	92	50	29.4	18.9	755	753
211	94	54	27.8	17.2	759	754
212	94	40	30.0	17.2	761	759
213	96	36	30.0	13.9	761	760
214	94	09	30.0	18.3	761	760
215	92	09	29.4	21.1	762	760
216	94	56	30.0	21.1	762	758
217	93	38	27.8	17.2	761	759
218	92	42	25.6	16.7	764	761
219	94	09	23.9	16.7	765	763
220	96	70	24.4	15.6	765	763
221	96	09	26.7	17.8	762	092
222	92	56	24.4	18.3	765	760
223	96	40	25.6	12.2	992	764
224	97	40	25.6	10.0	765	19/

(Continued)

	Relative Humidity	idity	Air Temper	ature	Barometric Pressure	Ssure
Jay of 1974	% %	Min.	o'c Max. Min.	Min.	mm of Mercury Max. Min.	آر Min.
225	94	64	27.2	20.0	761	759
226	94	52	32.2	18.9	762	761
227	92	44	29.4	19.4	765	762
228	94	56	29.4	17.2	764	761
229	94	58	30.0	20.0	761	754
230	94	38	30.0	17.2	758	756
231	92	55	26.7	18.9	761	758
232	96	34	29.4	16.1	992	762
233	92	46	28.9	17.8	797	99/
234	92	50	31.1	22.8	992	762
235	94	54	29.4	21.1	763	192
236	94	52	30.6	25.6	762	092
237	94	50	28.9	20.0	763	19/
238	96	62	28.3	21.1	762	092
239	94	09	30.0	20.0	761	758
240	92	54	32.2	21.7	758	756

(Continued) Weather Station Data

4	Relative Humidity	dity	Air Temperature	ature	Barometric Pressure	sure
Day of 1974	Max.	Min.	Max.	Min.	Max. Mercury	y Min.
241	94	20	33.3	20.6	758	756
242	92	46	32.2	22.2	758	756
243	92	09	28.9	21.1	758	756
244	92	50	29.4	18.9	759	755
245	95	50	26.7	18.9	759	754
246	93	54	30.0	15.6	756	752
247	93	50	26.1	12.2	763	756
248	94	56	20.6	10.0	797	763
249	95	98	18.3	16.1	767	763
250	94	80	18.9	14.4	763	762
251	93	48	24.4	15.6	764	762
252	94	44	26.1	15.0	764	763
253	92	50	26.7	16.1	763	761
254	95	99	26.7	18.9	762	761
255	94	50	31.1	18.3	761	758
256	95	46	30.6	19.4	759	757

(Continued) Weather Station Data

Dav of	Relative	Relative Humidity %	Air Tem	Air Temperature C	Barometric	Barometric Pressure
1974	Max.	Min.	Max.	Min.	Max.	Min.
257	94	50	21.7	11.7	762	737
258	96	46	22.8	8.9	763	761
259	94	40	25.6	111	762	761
260	92	50	26.1	15.0	762	757
261	94	45	26.7	13.9	762	759
262	93	44	27.8	15.6	765	762
263	94	42	28.3	15.6	763	160
264	92	46	27.8	13.9	160	754
265	94	38	21.1	8.9	763	761
266	94	36	15.0	3.9	770	762
267	96	36	20.0	2.2	177	768
268	96	36	22.2	3.9	992	757
269	96	34	24.4	8.3	757	756
270	96	45	25.6	8.3	761	758
271	94	84	23.3	15.0	760	756
272	92	44	28.3	15.6	756	750

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Continued	

	Relative Humidity	Humidity	Air Tem	Air Temperature	Barometri	Barometric Pressure
Jay ot 1974	Max.	Min.	Max.	ر Min.	Max.	mm ot Mercury Min.
273	98	34	21.1	٥. 8	759	756
274	94	34	19.4	6.1	762	759
275	94	32	13.9	3.3	768	762
276	92	32	10.0	9.0-	763	768
277	94	2.4	16.1	-2.8	772	762
278	96	ŹĬ	21.7	2.8	177	169
279	95	30	25.0	5.6	692	763
280	96	35	23.9	7.8	763	760
281	94	36	15.6	က္က	763	760
282	86	33	17.8	4.4	762	761
283	94	30	22.8	2.8	764	761
284	94	30	22.2	5.6	768	764
285	94	40	23.9	12.2	292	764
286	92	50	21.7	11.7	797	764
287	88	64	22.2	15.0	797	762
288	88	46	25.6	12.2	762	260

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	Ξ	7575
٠	2	5
٠	Ξ	5

Day of	Relative Humidity %	umidity	Air Temperature O C	erature C	Barometric Pressure	ressure
1974	Max.	Min.	Max.	Min.	Max.	Min.
289	94	98	12.8	10.0	769	754
290	92	32	20.6	4.4	761	755
291	94	34	13.3	6.7	762	756
292	92	32	9,4	-1.7	764	761
293	92	34	8.3	-3.3	770	762
294	06	28	10.0	-2.2	775	770
295	96	16	18.9	-2.8	776	770
296	96	27	21.1	-1.1	764	762
297	86	26	12.8	2.2	763	992
298	06	42	21.7	4.4	766	760
299	94	48	17.3	3.3	756	762
300	96	18	21.1	[-]	764	762
301	96	40	18.9	1.7	767	764
302	94	53	21.1	5.6	769	767
303	96	54	22.2	10.0	770	767
304	94	50	23.3	11.11	767	764

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	-					
Day of	Kelative Humidity	mldlty	Alr lemperature	ature	Barometric Pressure	ssure
1974	Max.	Min.	Max.	Min.	Max. Min. or mercury	Min.
305	94	32	28.9	13.9	764	761
306	88	30	24.4	13.3	764	762
307	97	46	21.1	10.0	762	757
308	92	23	28.9	13.9	757	753
309	92	48	22.2	14.4	757	754
310	88	36	16.1	3.3	763	757
311	93	46	13.3	2.2	763	762
312	82	34	15.6	5.0	764	762
313	96	28	17.8	1.1	992	763
314	86	24	15.6	-1.1	992	763
315	98	54	14.4	-2.2	763	753
316	94	86	14.4	4.4	758	748
317	06	32	11.7	2.8	760	749
318	06	34	18.3	3.9	092	757
319	94	30	7.8	-3.3	992	092
320	96	30	11.11	-6.1	770	797

(Continued)

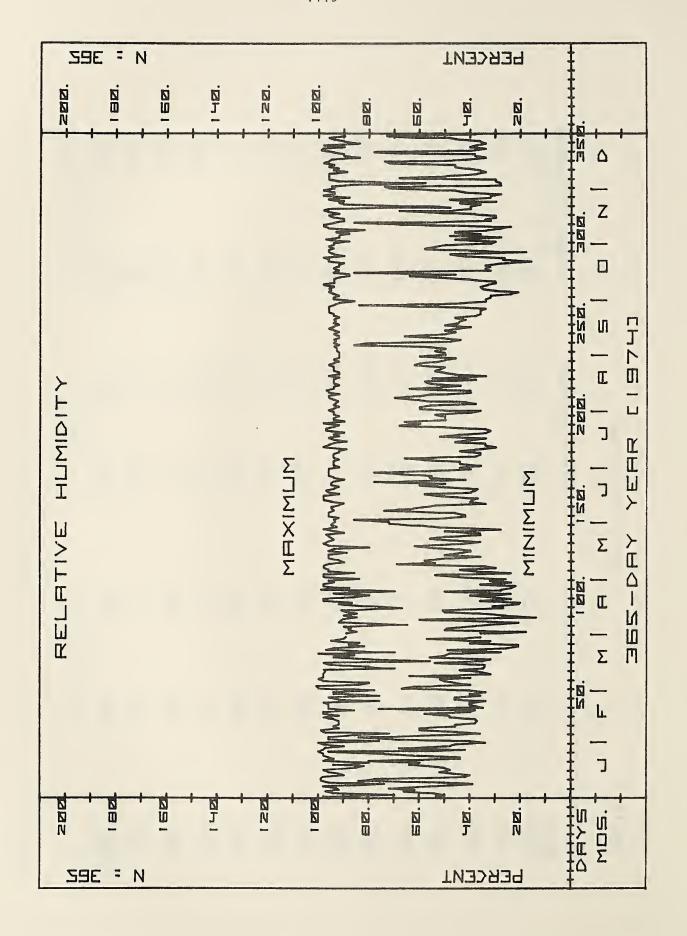
Barometric Pressure 99/ 99/ mm of Mercury 99/ 99/ 99/ 99/ 69/ 69/ 69/ 5.6 -2.8 -5.6 2.2 -3.3 -2.8 -3.9 -5.6 3,3 Air Temperature O C -6.7 13.3 8.3 10.0 14.4 19.4 13.3 2.8 5.6 4.4 5.6 Relative Humidity Max. Day of 1974 

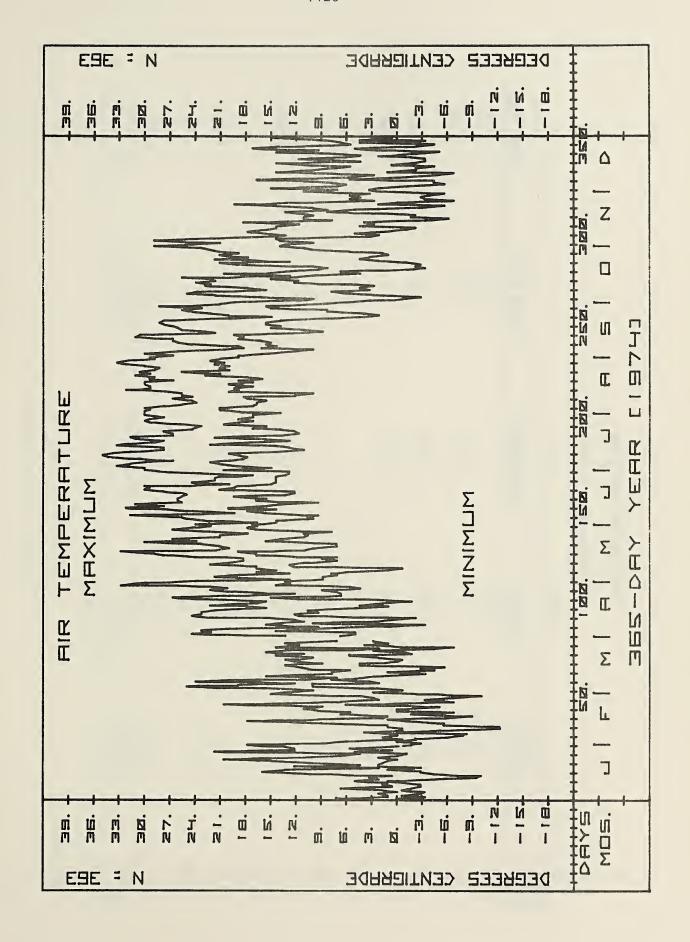
Weather Station Data

Day, of	Relative Humidity	umidity	Air Te	Air Temperature O	Barometr	Barometric Pressure
1974	Max.	Min.	Max.	Min.	Max.	mm or Mercury
337	88	28	15.0	2.2	756	745
338	58	28	7.2	-1.1	797	756
339	92	30	6.1	-5.6	•	٠
340	96	30	7.8	-4.4	1	•
341	96	63	10.0	-4.4	797	758
342	96	50	16.7	5.6	761	758
343	96	38	6.7	-1.1	765	757
344	89	34	2.8	-5.0	757	750
345	94	36	8.9	-6.7	759	755
346	92	40	14.4	1.1	762	759
347	96	46	10.0	-2.2	764	192
348	94	46	8.3	-2.2	797	760
349	86	72	5.6	-4.4	768	761
350	96	74	11.11	9.0	761	748
351	95	42	14.4	-2.2	755	751
352	34	34	4.4		762	753

mm of Mercury Min. Barometric Pressure 99/ 69/ -5.0 2.8 5.0 4.4 -3.3 4.4 9.0 Air Temperature O C 14.4 17.2 14.4 5.6 10.0 15.0 6.7 6.1 Relative Humidity Min. Max. Day of 1974 

(Continued)





Weather Station Data Centimeters of Water

Vest	۲0		ις.	<b>5</b> +			e c		<b>S</b> 1	<del></del>	6					
North West	0.56	1	0.46	1.14	•	1	Trace		1.42	1.14	0.89	ı		1	1	-1
South East	2.06	ı	1.22	ı		ı	ı	ı	1.40	ı	2.29	1	ı	ı	ı	
South West	ı	ı	72	1.3/	ı	ı	1	ı	1.37	0.97	1.17		1	ı	ı	ı
Central	1.30	1	1	1.40	1	ı	ı	1	1.32	0.84	1.19	)	0.05		1	ı
South Central	1.07	ı	1.32	1	1	ı		ı	\ \ \ \	3.10	0,53	ı	1	ı	1	
Nav of 1974	-	2	т	4	2	9	7	ထ	6	10	Ε	12	13	14	15	16

Weather Station Data

, of 174	South Central	Central	South West	South East	North West
17			1		
18	ı	1	,	ı	•
19	,	1	0.13	1	0.08
20	ı	1		1.19	1
12	1.40	1.27	1.32	ı	1.17
22	ı	ı	ı	ı	ì
23	ı	ı	ı	ı	ı
24	1.32	ı	0.30	i	0.38
25	ı	1.24	1.04	ı	0.97
26	0:30	ı	0.25	1.63	0.20
27	ı	ı	١,	1	0.08
28	į	ı	0.51	0.15	0.30
29	ı	0.23	1	ı	ı
30	ı	ı	•	ı	1
31	ı	ı	1	ı	ı
32	ı	ı	1	ı	ı

Weather Station Data Centimeters of Water

South Central	Central South West	South East	North West
0.53	0.61	ı	0.61
t		ı	ı
1 (	ı	t	ı
0.05	ı	1,55	0.18
0.76	0.84		0.71
1.22	0.89	ı	0.71
0.13	1	0.38	Trace
0.08	0.05	t	ı
ı	t	1	Trace
1,	ı	ı	ı
0.05	0.05	ı	ľ
0.10	,	ı	r
Trace	ı	ı	ı
0.10	0.51	ı	0.38
0.33			0.02

Weather Station Data

\																
North West	1	1	1	1	0.23	1		0.18	1				0.33			ı
South East	-1	1	•		•	0.84		1	1	ı		,				•
South West		0.05	1	0.30	0.05	1	ı	1	1	1	1	1	0.43	1	1	ı
Central		0.02	1	0.02	0.25	1	0.05	0.20	ı	0.05	0.02	ı	0.30	ı	1	ı
South Central Cent		ı	1	1	0.74	1	1	ı	ı	1	1	ı	ı	ı	ı	ı
Day of 1974	49	20	5	52	53	54	55	99	57	58	59	09	19	62	63	64

Weather Station Data Centimeters of Water

	North West	0.53	0.03	,	Trace	1	Trace	0.53	1	,		2.79	0.18	1	ī	ı	3,35
	South East	1	ı	ı	ı	1,09	,		1	1			3.45	•	ı	ı	
	South West	0.61	,	ı			ı	0.66	1	1	1	2.87	ı	ı	0.08	1	3.48
	Central	0.18	0.61	0.10	,	ı	0.05	0.61	ı	t	0.05	2.29	0.84	t	0.18	1	3.30
South	Central	1	1.07	ı	1	ı	<b>-</b>	_	3.56	***Time*********************************		$\rightarrow$	1	1	1	1	3.33
Day of	1974	65	99	29	89	69	70	71	72	73	74	75	92	77	78	79	80

Weather Station Data

North West		Trace	,	•				1.22	4.70	0.23	ı	0.10	1	0.13	1.70	ŀ
South East	3.43	<b>←</b>			5.59				$\rightarrow$	0.79	ı	I	ı	0.28	ı	
South West Sc	1	í	T)		ı	ı	ı	0.94	5.03	0.23	ı	ı	ı	0.15	1.88	
Central	0.02	ı	0.10	ı	0.13	0.05	0.08	0.64	5.64	0.20	1	0.10	1	0.05	1.98	
South Central	<b>←</b>				2.79			$\rightarrow$	0.76		1	1	ı		1.68	
Day of 1974 C	81	82	83	84	85	86	87	88	68	06	91	92	93	94	95	

Weather Station Data

North West	ı	1.42	2.16	0.02	1	1	1	0.89	i	ı	ı	ı	1	ı	- 1	
South East	4.83	000	1.30	ı	ı	ı	0.76	ı	ı	-1	ı	1	1	ı	ı	
South West	ı	1.98	1.88	0.02	1	1	0.69	ļ	ı	ı	ı	ı	ı	•	•	96.0
Central	0.05	0.81	2.69	0.02	Trace	0.05	0.69	Trace	1	0.05	0.10	0.08	0.05	Trace	Trace	1
South Central		ı	3.45	<del></del>		4.11		$\rightarrow$	1	ì	ı	ı	1	1	ì	1
Day of 1974	26	86	66	100	ווו	102	103	104	105	106	107	108	109	110	111	112

Weather Station Data

															1	
North West	0.89	ı	ı	ı	ı	ı	ı	ı	ı	1	1.78	1	1	0.46	Trace	ı
South East	0.89	ı	ı	ı	ı	ı	ı	1	ı	ı	ı	1.52	1	ı	0.50	1
South West		ı	ı		0.43	ı	ı	1	ı	ı	1.42	ı	0.38	0.10		•
Central	1.04	Trace	0.02	0.05	ı	ı	0.02	1	0.05	0.08	1.52	ı	0.02	0.56	0.78	ı
South Central	0.89	ı	ī	l	ı	ı	ı	1	i	ı	1.52	ı	ı	0.64	<del>(</del>	0.79
Day of 1974	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128

Weather Station Data Centimeters of Water

Day of 1974	South Central	Central	South West	South East	North West
129	$\rightarrow$	0.64	ı	ı	0.58
130	1	0.10	0.08	0.66	0.02
131	ı	ı	1	ı	ı
132	2.62	0.84	1	ı	0.20
133	<b>←</b>	1.65	1	2.77	0.13
134		Trace	ı	į	ı
135		ı	ı	ı	ı
136		ı	ı	ı	ı
137		0.05	ı	ı	ı
138	1.37	ı	ı	ı	0.05
139		Trace	2.57	ı	ı
140		•	1	,	ı
141		ı	1		
142		I	ı	ı	•
143		0.89	1.14	ı	0.79
144	<b>→</b> >	0.25	1	1.32	0.28

Weather Station Data

ay of	South				
	Central	Central	South West	South East	North West
	<b>(</b>	ı			
		1	ı	ı	1
	1.37	0.10		ı	0.05
		ı		ı	Trace
		0.08	0.18	ı	0.13
	$\rightarrow$	1.50	1.90	1.52	2.01
	ı	•	1	1.02	ı
	-	0.48	1.65	0.02	Trace
	9 : 6	4.60	3.56	,	6.30
	<b>←</b>	0.30	0.25	4.00	ı
		Trace	ı	ı	I
	3.07	Trace	ı	ı	ı
	<u> </u>	,	•	ı	•
		0.05	1	ı	ı
		0.28	0.64	ı	0.33
		1	•	1	1

Weather Station Data Centimeters of Water

Day of	South				
1974	Central	Central	South West	South East	North West
191	_	0.05	1	1	1
162		0.08	ı	ı	ı
163		0.02	1	ı	ı
164		0.08	1	ı	ı
165		ı	-1	ı	ı
166	3.07	0.08	1	ı	ı
167		0.69	0.38	ı	0.79
168		0.13	1	0.43	0.15
169		0.02	ı	ı	ı
170		0.05	1	ı	ı
171		0.02	ı	ı	I
172	>	0.05	3.43	ı	ı
173	1	1.65	1	2.13	0.18
174	2.21	1.98	1	1.52	2.77
175	ı	0.05	1.52	0.25	0.05
176	ı	,	,	ı	,

Weather Station Data

Centimeters of Water

	Nest		œ	2	e C												
	North West	•	0.48	1.75	Trace	•	1	•	1	)1	•		1	. '	1	1	1
	South East	1	0.64		2.13		0.02			ı	11	11	1			1	
	Sou																
	est																
	South West	1.17	•	1.37	0.08	1	0.02	).	11	i.	1	1	1	1	1		0.08
	Central	ı	0.64	1.70	0.33	-1		0.05	0.08	0.10	0.05	0.05	0.02	0.05	0.05	0.05	0.08
outh	Central	0.41	1	1.78	1	1	<del></del>			w						· · · · · · · · · · · · · · · · · · ·	
S	Ce																
/ 0f	1974	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192
Day	[-]				_		_				_						, -

Weather Station Data Centimeters of Water

95	14.70				
1974	South Central	Central	South West	South East	North West
193	2000	0.10	1	ı	1
194		0.05	h	h	ı
195		0.05	1	h	ı
196		0.02	Ir	å	1
197		0.02	lı.	ı	1
198		0.05	1	ı	ı
199		0.08	ı	-1	ı
200	1.47	0.23	0.13	0.13	ı
201		ı		1	0.13
202		Trace	-	1	1
203		Trace	1	1	
204		Trace	٠	ı	ı
205		0.20	0.25	0.38	0.15
206		Trace	1,	ı	ı
207		0.10	0.13	0.23	0.05
208		ı	•	ı	1

Weather Station Data

North West			1.35	,		Trace	0.28	0.02	0.23		1.32	0.89	0.94	0.08		
North	•	'	<u>-</u> -	'	1	7	0.	0.	0.	l	<u>-</u>	0.	0.	0.	'	
South East		ı	1.24	•	1	ı	0.23		1		2.01	i	ı	1.02	ı	ı
South West	1	1.45	0.05		ı	1	0.15	0.30	1	1	1.57	0.76	0.15		ı	1.47
Central	0.02	0.02	1.40	1	0.02	0.02	ı	0.10	0.20	0.20	1.65	ı	0.69	0.15	1	1
South Central	_			$\rightarrow$	ı	0.02	ı	ı	ı	ı	1.90	0.66	0.13	ı	l.	ı
Day of 1974	209	210	1112	212	213	214	215	216	217	218	219	220	221	222	223	224

Weather Station Data

North West	0.48	ı	1	1	Trace	ı	1	Trace	ı	1	1.47	1	Trace	i i	ı	ı
South East	ı	ı	0.18	ı	1	. 1	ı	ı	-1	ı	0.33	ı	ı	ı	2.64	ı
South West	1	i	0.10		ı	1	0.08	1	1	0.05	1.22	ı	ı	2.39	1	•
Central	0.51	0.02	0.02	0.02	ı	ı	Trace	Trace	-1	Trace	1.52	ı	ì	ı	2.41	Trace
South Central	0.69	ı	•	ı	ı	1	ı	ı	ı	0.28	ı	ı	ı	3.56	ı	ı
Day of 1974	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240

Weather Station Data

	South Central	Central	South West	South East	North West
	1.38	0.03	ı	1	0.02
	1	0.02	2.03	1	ı
	ı	ı	ı	1.78	1.22
Ŭ	96.0	1		ı	Trace
	ı	1	ı	ı	Trace
	2.62	1.35	1.14	1.32	1.27
	ı	2.77	2.29	0.43	2.31
	ı	0.02	ı	ı	ı
	ı	0.97	1.45	1.12	71.1
	3.91	3.05	2.36	ı	2.54
	ı	Trace	ı	ı	,
		1	ı	1	
	0.51	0.05		ı	Trace
	1	0.51	0.43	0.46	0.53
	1	1	1	ı	ı
	ı	Trace	l	ı	ı

Weather Station Data

North West		Trace	ı	Trace	1	1		1_	0.28		I)	•	1	ı	3.73	0.64
South East	1	ı	ı	ı		ı		ı	0.43	1			1	ı	ı	2.21
South West	ı	1	1		ī	ı	0.25		1	1	ı	1	ı	1	4.14	ı
Central	1	0.02	0.08	i	Trace	Trace	Trace	Trace	0.28		0.08	ı	0.05	0.02	3.66	0.33
South Central	1	-1	ı	ı	ı	ı	ı		ı	ı	ı	1	ı	1	3,48	0.30
Day of 1974	257	258	259	260	261	262	263	264	265	566	267	268	569	270	172	272

Weather Station Data Centimeters of Mater

Day of	South		de sous manuelle sous misser de sous de se d		
	Central	Central	South West	South East	North West
	1	Trace	0.38	ı	ı
	ı	0.05	1	ı	ı
	1	0.02	T	1	Trace
	1	0.05	I	ı	ı
	1	0.02	ı	ı	ı
	H	0.05	T	ij.	I
	1	0.02	ı	ı	I
	1	0.02	ı	ı	l
	ı	0.05	3.12	·	ı
	T.	Trace	i.	1	ı
	ı	0.02	r	ı	ı
	ı	0.02	1	ı	ı
	ı	0.02	ı	ı	ı
	ı	Trace	ı	1	ı
	ı	Trace	ı	ı	ı
	1	ı	1	1	I

Weather Station Data

400	A 11	·	Trace	ı	ı	ı	ı	•	ı	-1	1	ı	ı	ı	ı		1
+ + + + + + + + + + + + + + + + + + +			2.82	1)	ı	ı	1	ı	ı	ı	1	ı	ı	)1	1	I	I
+ 5 0 1 1 4 1 1 2 3			ı	ı	1	ı	ı	ı	ı	ı	•	ı	ı	ı	ı	ı	ı
	3 94		0.10	0.02	ı	1	1	Trace	0.02	1	,	Trace	0.02	0.02	0.02	0.02	1
South			ı.	1	ı	ı	ı	i	1	ı	i	ı	1	1	ı	ı	ı
Day of			290	291	292	293	294	295	296	297	293	299	300	301	302	303	304

Weather Station Data

Day of 1974	South Central	Central	South West	South East	North West
305	ı	1	ı	ı	1
306	ı	ı	ı	ı	,
307	,	ı	ı	-	ı
308	ı	1	1	ı	1
309	0.74	0.71	0.76	ı	i
310	ı	1	1	ı	0.76
311	ı	ı		0.84	ı
312	1	ı	ı	ı	1
313	1	ı		ı	i
314	,	ı	ı	1	ı
315	1	Trace	ı	ı	ı
316		0,99	1.19	ı	1.02
317	1.09	0.15	0.13	1.09	I
318		Trace	ı	ı	I
319	ı	0.28	ı	0.23	0.41
320	ı	1	1	ı	ı

Weather Station Data

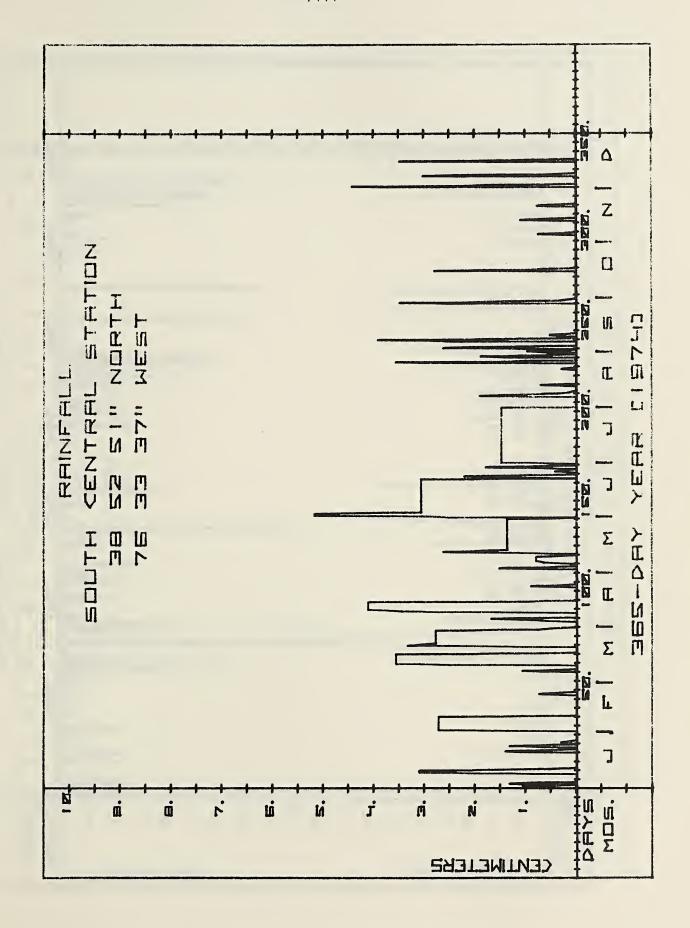
-					
Day of 1974	South Central	Central	South West	South East	North West
321	1			1	1
322	,	0.05	ı	1	ı
323	ı	0.02	1	ı	Trace
324	ı	0.15	0.64	ı	0.25
325	0.76	0.20	0.23	ı	0.23
326		ı	ı	0.56	1
327	ı	,	ı	ı	ı
328	ı	-	ı	ı	ı
329	ı	0.58	ı	1	0.43
330	1	ı	ı	0.89	0.20
331	1	ı	ı	ı	ı
332	ı		ı	ı	1
333	i	ı	ı	1	1
334	1	ı	i	ı	ı
335	1	2.56	1.47	1.90	1.35
336	4.42		2.64	ı	1.42

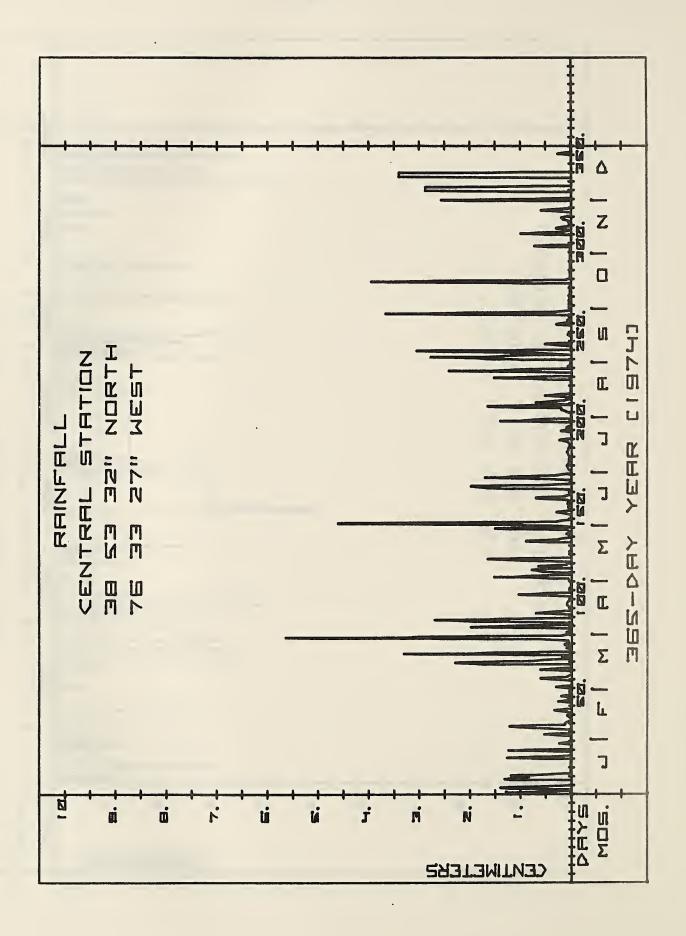
Weather Station Data

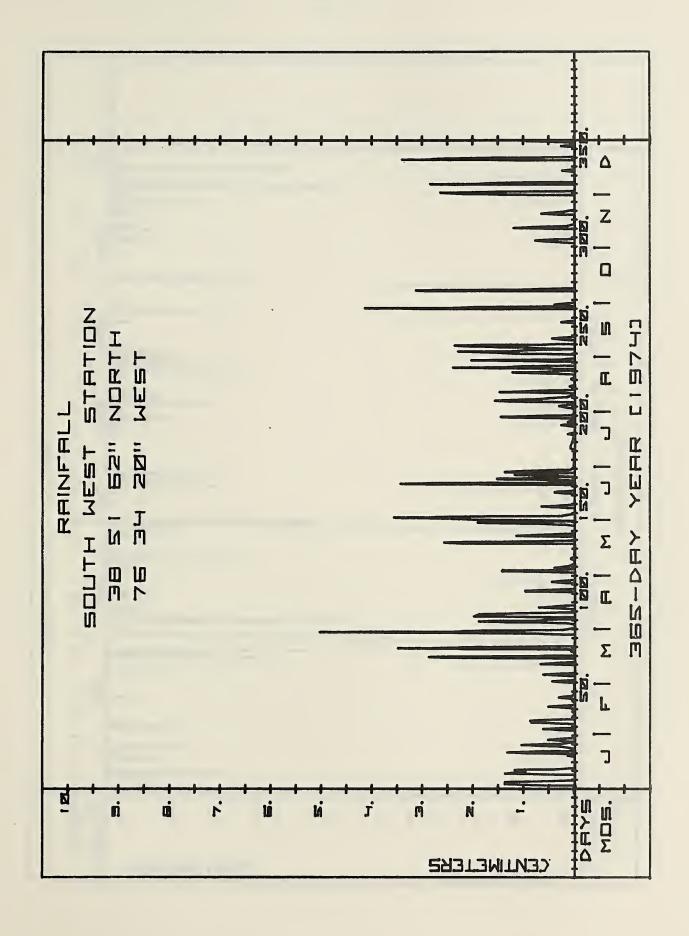
- toa		e)					0				ce	(	$\infty$		9	Trace	
Nowth West	5 5 5	Trace	ŧ	1	1	1	3.10		1	1	Trace	1	0.28	1	3.26	<u>-</u>	1
4	SOUTH EAST	1	1	1	1	1	4.52	ı	1	,	ı	0.28	1	1	1	3.50	1
	South West	1	1	1		2.84	1	1	ı	t	1	1	0.23		ı	1	1
	Central	1	ŧ	ı	\	2.87	,	1	1	ı	ı	ş	No. John	3.40		1	1
South	Central	1	ı	í	ı	1	3.02	ı	ı	ı	1	ı	1	ı	3.48	,	1
Dav of	1974	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352

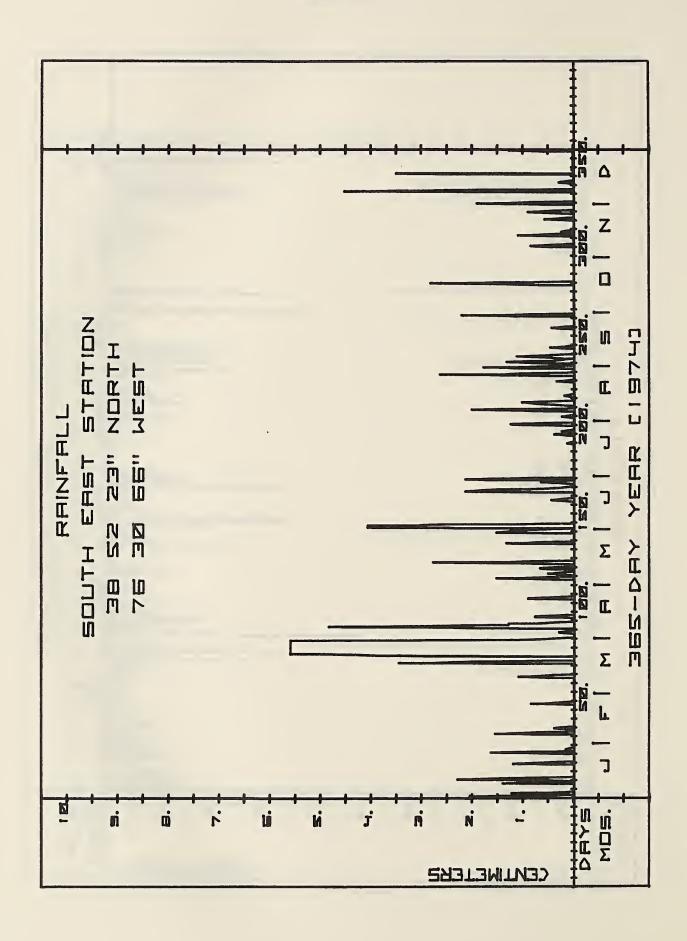
Weather Station Data

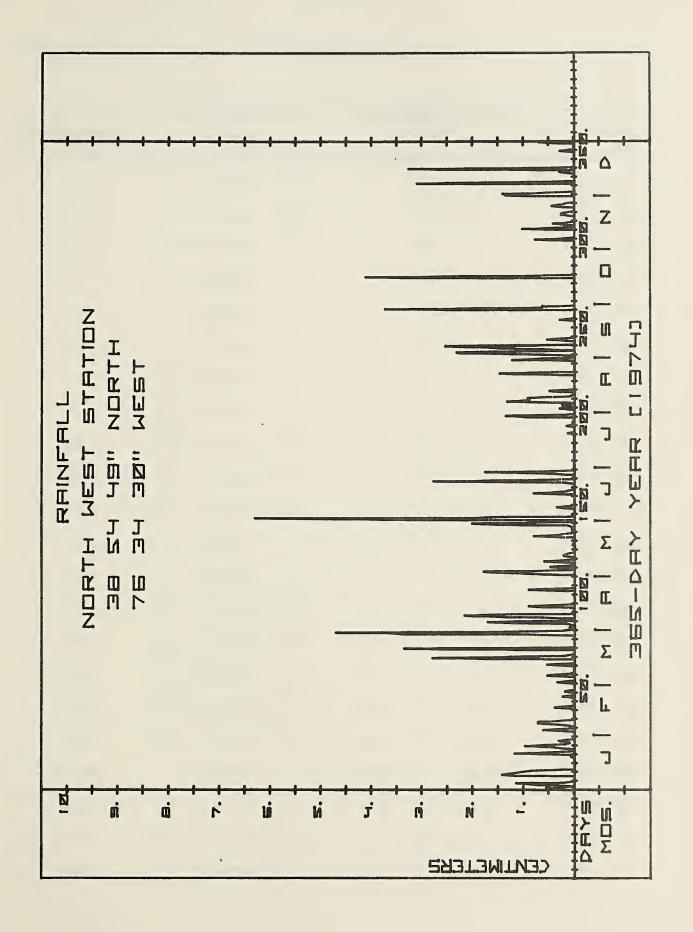
North West	ı	ı	1	ı	ı	1	1	0.28	Trace	ı	- 1	ı	69.0
South East		0.05	ı	ı	1	ı	1	ı	I	I	ı	ı	1.27
South West		1	3.40	ı	ı	1	1	ı	I	0.25	•		0.94
Central	Trace	1	Ĭ,	I	ı	ı	ı	ı	0.25	1	1	ı	1
South Central		ı		ı	•	ı	ı	ı	ı	ı	1	1	1
Day of 1974	353	354	355	356	357	358	359	360	361	362	363	364	365











Evaporation Data

Day of	Water	Temperature O C	Wind	Evaporation
1974	Max.	Min.	Km	Cm
91	-	-	13.30	
92	-	-	3.67	-
93	-	-	21.50	-
94	-	-	21.50	-
95	-	-	41.70	1-1
96	-	-	41.70	-
97	-	-	41.70	-
98	-		74.71	-
99	-	-	15.54	0.43
100	-	-	50.84	0.38
101	-	-	15.35	0.36
102	-	-	21.26	0.41
103	-	-	21.26	0.41
104	-	-	21.26	0.41
105	25.0	13.9	97.02	0.89
106	-	-	2.30	0.66
107	25.6	5.6	12.31	0.53
108	25.6	6.7	14.23	0.53
109	25.0	11.1	12.24	0.38
110	17.8	4.4	11.87	0.30
111	-	-	11.87	0.30
1.12	28.3	7.8	44.38	1.07

Day of	Water Tem O (	perature	> Nind	Fuanamation
Day of 1974	Max.	Min.	Wind Km	Evaporation Cm
113	26.7	16.1	29.40	0.58
114	25.6	7.8	32.50	0.46
115	23.9	4.7	24.49	0.36
116	25.6	8.9	18.02	0.56
117	-	-	18.02	0.56
118	-	-	18.02	0.56
119	32.2	11.1	44.25	1.52
120	33.3	17.2	7.71	0.53
121	32.8	17.8	34.93	0.89
122	28.3	10.6	12.37	0.58
123	23.9	10.6	1.18	0.08
124	-	-	1.18	0.08
125	-	-	1.18	0.08
126	26.1	9.4	54.07	1.47
127	23.3	7.8	13.36	0.53
128	24.4	5.6	14.17	0.43
129	24.4	12.2	22.93	0.30
130	26.1	15.0	31.08	0.10
131	-	-	31.08	0.10
132	-	-	31.08	0.10
133	28.9	12.2	50.96	1.22
134	31.1	12.2	10.56	0.36
135	33.3	16.7	24.86	0.64

Day of	Water Temperature O C		Wind	Evaporation
1974	Max.	Min.	Km	Cm
136	35.6	20.0	8.14	0.61
137	-	-	8.14	0.61
138	-	-	8.14	0.61
139	-	-	8.14	0.61
140	37.2	11.1	38.10	1.83
141	30.6	15.6	7.71	0.43
142	34.4	15.6	1.49	0.30
143	34.4	21.7	11.56	0.66
144	29.4	17.8	5.97	0.28
145	-	-	5.97	0.28
146	-	-	5.97	0.28
147	-	-	5.97	0.28
143	30.0	12.2	36.54	1.70
149	28.9	17.2	9.82	0.36
150	28.9	20.6	3.17	0.36
151	27.8	18.9	6.28	0.28
152	-	-	-	-
153	-	-	-	-
154	30.0	15.6	20.14	0.53
155	32.2	17.2	6.34	0.43
156	33.9	17.8	8.20	0.58
157	33.3	16.7	6.59	0.64
158	33.3	17.8	13.55	0.56

Day of	Water Temperature O C		Wind	Evaporation
1974	Max.	Min.	Km	Cm
159	33.3	17.8	13.55	0.56
160	33.3	17.8	13.55	0.56
161	38.9	18.9	24.11	1.02
162	38.3	22.2	16.03	0.89
163	30.0	17.2	12.93	0.46
164	31.7	16.1	8.08	0.58
165	32.2	19.4	9.51	0.56
166	32.2	19.4	9.51	0.56
167	32.2	19.4	9.51	0.56
168	33.9	18.8	44.00	1.70
169	32.2	16.7	6.46	0.53
170	32.8	17.8	10.81	0.61
171	34.4	21.7	15.54	0.61
172	34.4	22.2	13.92	0.51
173	34.4	22.2	13.92	0.51
174	34.4	22.2	13.92	1.29
175	33.3	16.7	43.13	0.15
176	29.4	18.3	11.44	0.43
177	26.7	17.8	11.75	0.36
178	27.2	18.3	8.51	0.23
179	25.6	16.7	33.56	0.23
180	25.6	16.7	33.56	0.23
181	25.6	16.7	33.56	0.23

Day of	Water Temperature o C		Wind	Evaporation
Day of 1974	Max.	Min.	Km	Cm
182	33.9	14.4	34.84	0.96
183	-	-	34.84	0.96
184	38.9	20.0	15.40	1.22
185	38.9	23.9	4.35	0.64
186	38.9	23.3	11.49	0.66
187	-	-	11.49	0.66
188	-	-	11.49	0.66
189	39.4	21.1	13.48	1.42
190	39.4	23.9	4.16	0.86
191	38.9	25.0	7.45	0.61
192	37.8	22.8	16.27	0.76
193	33.3	16.7	11.68	0.71
194	-	-	11.68	0.71
195	-	-	11.68	0.71
196	37.2	17.8	24.10	1.78
197	36.7	22.2	7.64	0.56
198	35.0	19.4	6.40	0.64
199	34.4	21.1	5.03	0.53
200	35.0	24.4	7.58	0.53
201	-	-	7.58	0.53
202	-	-	7.58	0.53
203	34.4	17.8	4.03	2.06
204	33.3	19.4	10.31	0.48

Day of	Water Tem O C		Wind Evaporatio	
1974	Max.	Min.	Km	Evaporation Cm
205	27.8	21.1	3.48	0.15
206	25.6	20.0	6.09	0.18
207	29.4	21.1	9.01	0.18
208	-	-	9.01	0.18
209	-	-	9.01	0.18
210	37.8	22.2	23.10	1.50
211	37.2	20.6	13.73	0.69
212	35.6	21.7	2.73	0.51
213	34.4	19.4	5.16	0.51
214	35.0	21.7	8.32	0.43
215	35.0	21.7	8.32	0.43
216	35.0	21.7	8.32	0.43
217	33.9	22.2	34.84	0.91
218	33.9	17.8	6.21	0.23
219	31.7	19.4	12.17	0.33
220	26.7	18.9	4.97	0.20
221	26.7	18.9	4.97	0.20
222	26.7	18.9	4.97	0.20
223	26.7	18.9	4.97	0.20
224	32.2	16.1	33.29	1.27
225	32.2	16.1	33.29	1.27
226	32.2	16.1	33.29	1.27
227	36.7	21.7	19.50	1.14

Day of	Water Te	Water Temperature O C		Evaporation
1974	Max.	Min.	Wind Km	Cm
228	35.6	21.1	6.52	0.48
229	35.6	21.1	6.52	0.48
230	35.6	21.1	6.52	0.48
231	-(	-	12.36	1.04
232	35.6	20.0	4.04	0.33
233	34.4	19.4	12.36	0.48
234	32.8	21.1	12.98	0.43
235	36.7	23.3	3.79	0.48
236	35.6	23.9	3.79	0.48
237	-	-	3.79	0.48
238	35.0	22.8	23.66	1.37
239	33.3	21.7	3.54	0.15
240	35.0	23.9	4.47	0.30
241	36.7	23.9	5.96	0.33
242	36.7	24.4	10.31	0.51
243	-	-	-	-
244	35.6	23.3	-	-
245	35.6	23.3	34.41	0.51
246	35.6	23.3	34.41	0.51
247	33.3	17.8	19.19	2.13
248	33.3	15.6	8.63	0.33
249	33.3	15.6	8.63	0.33
250	33.3	15.6	8.63	0.33

Day of	Water Temperature O C		Wind	Fuanomation
1974	Max.	Min.	Km	Evaporation Cm
251	33.3	15.6	8.63	0.33
252	31.1	16.7	35.22	0.10
253	31.7	16.7	10.87	0.005
254	31.7	16.7	10.87	0.005
255	31.7	16.7	10.87	0.005
256	31.7	16.7	2.61	1.35
257	31.7	16.7	2.61	1.35
258	31.7	16.7	2.61	1.35
259	31.7	16.7	2.61	1.35
260	31.7	16.7	26.09	1.17
261	31.7	16.7	6.71	0.28
262	31.7	16.7	6.71	0.28
263	21.1	-	9.13	0.46
264	21.1	-	9.13	0.46
265	21.1	-	9.13	0.46
266	20.0	-	43.85	1.22
267	11.1	-	9.13	0.33
268	11.1	-	9.13	0.33
269	11.1	-	9.13	0.33
270	11.1	-	9.13	0.33
271	11.1	-	9.13	0.33
272	11.1	-	9.13	0.33
273	21.1	11.7	57.89	1.63

Day of	Water Temp	Water Temperature O C		Evaporation
1974	Max.	Min.	Wind Km	Cm
274	24.4	10.0	14.53	0.38
275	22.2	10.0	17.70	0.38
276	19.4	3.3	22.98	0.38
277	19.4	3.3	22.98	0.38
278	19.4	3.3	22.98	0.38
279	19.4	3.3	22.98	0.38
280	19.4	3.3	22.98	0.38
281	19.4	3.3	22.98	0.38
282	26.1	2.2	40.93	1.68
283	-	-	40.93	1.68
284	24.4	7.8	9.63	0.48
285	24.4	7.8	9.63	0.48
286	24.4	7.8	9.63	0.48
287	24.4	7.8	9.63	0.48
288	24.4	15.0	32.55	0.79
289	24.4	15.0	32.55	0.79
290	24.4	15.0	32.55	0.79
291	24.4	9.4	33.73	0.99
292	24.4	9.4	33.73	-
293	24.4	9.4	33.73	-
294	17.2	1.1	35.59	0.76
295	17.2	2.2	4.53	0.20
296	17.2	4.4	6.15	0.20

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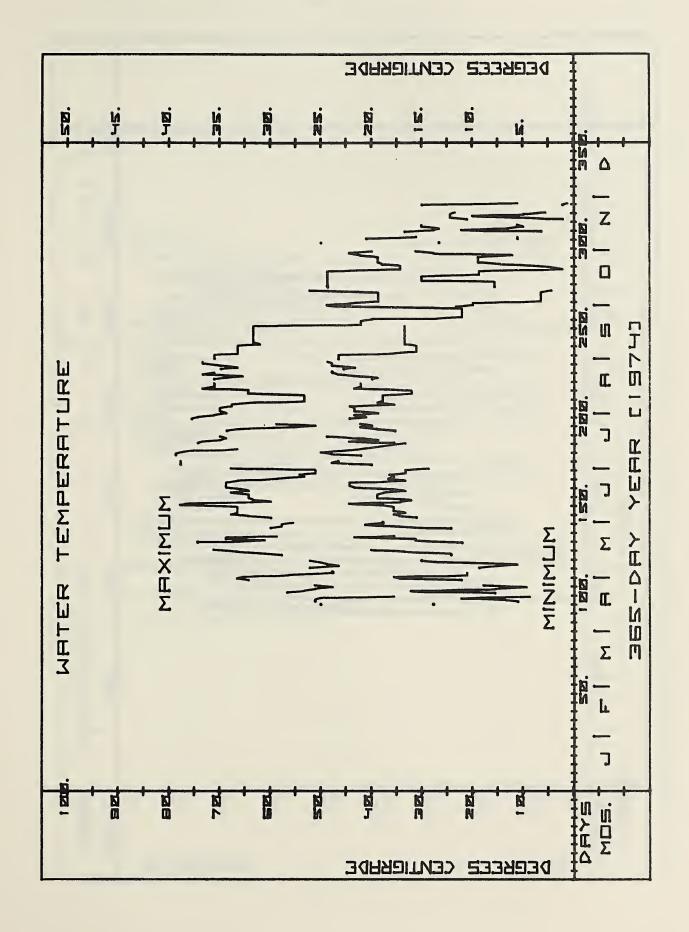
## Evaporation Data

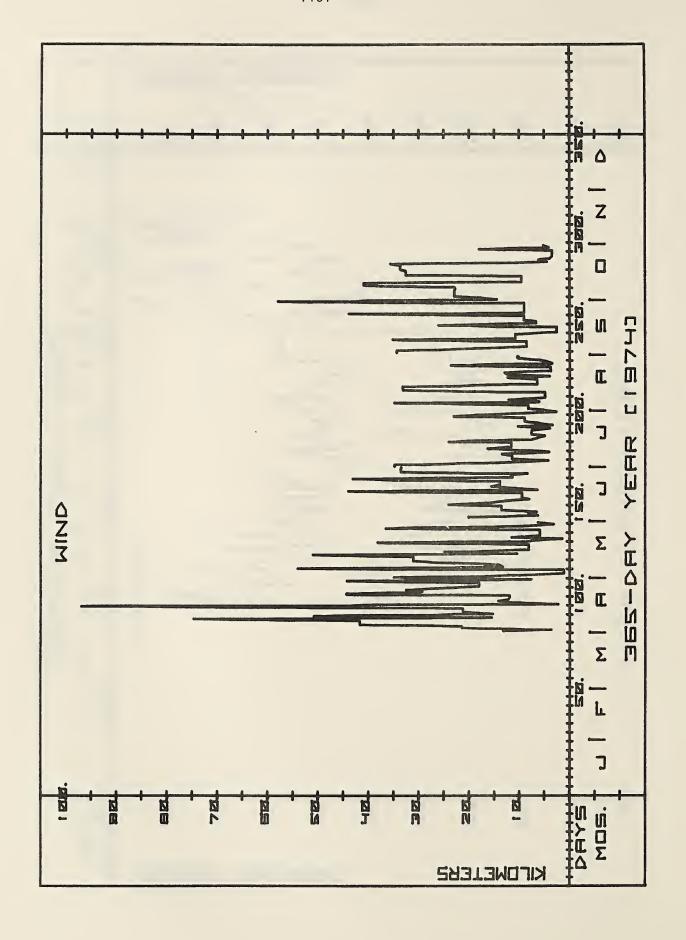
Day of	Mater Tel	nperature	Wind	Evaporation
1974	Max.	Min.	Km	Cm
296	17.2	4.4	6.15	0.20
297	18.9	7.2	4.04	0.23
298	19.4	9.4	3.42	0.20
299	19.4	9.4	3.42	0.20
300	19.4	9.4	3.42	0.20
301	19.4	9.4	3.42	0.20
302	21.1	6.1	17.95	0.81
303	22.2	13.8	4.22	0.10
304	20.0	15.6	5.22	0.20
305	-	-	-	-
306	-	-	-	-
307	-	-	-	-
308	-	-	=	-
309	25.0	13.3	-	-
310	-	-	-	-
311	20.6	5.6	-	
312	15.6	5.6	-	-
313	-	-	-	-
314	-	-	-	-
315	16.7	3.3	-	-
316	13.9	11.1	-	-
317	13.3	6.7	-	-
318	15.0	5.0	-	-

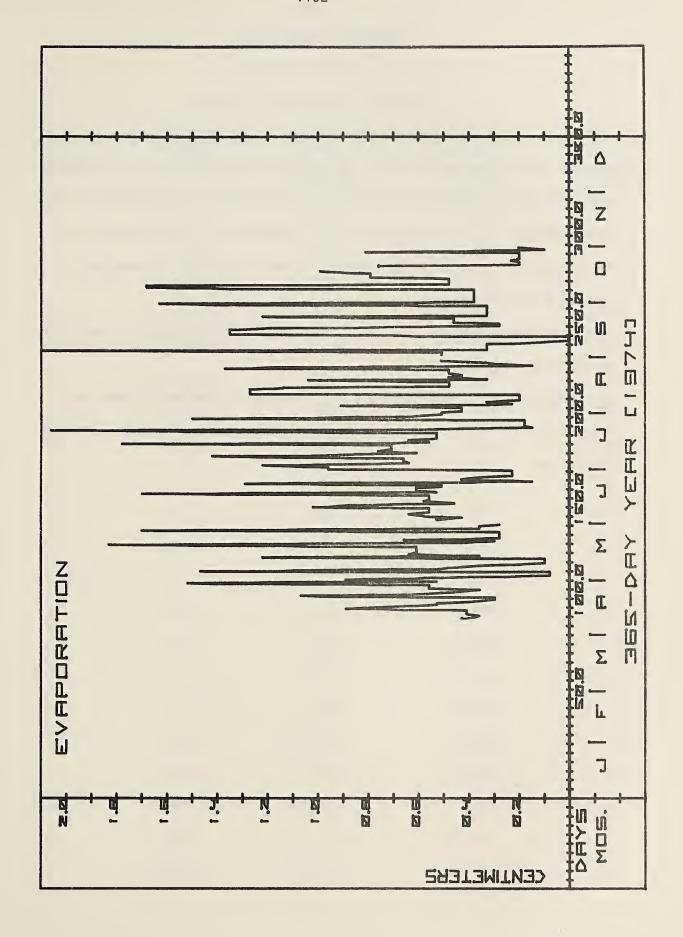
(Continued)

## Evaporation Data

Day of	Water Ten	perature	 Wind	Evaporation
1974	Max.	Min.	Km	Cm
319	15.0	5.6	-	-
320	-	-	-	~
321	-	-	-	<b>*</b> ***********************************
322	10.6	1.1	-	~
323	12.2	5.6	-	-
324	12.2	10.0	-	-
325	12.2	5.0	-	-
326	11.7	2.8	-	-
327	-	· -	-	-
328	-	-	-	-
329	-	-	-	-
330	15.0	1.1	-	-
331	5.6	0.6	-	-
332	-	-	-	-
333	-	-	-	-
334	_	-	-	-







## Rainfall Composition

Technique - Rain was collected with large polyethylene funnels which drained into glass reservoirs. The collection apparatus was located on the roof of the laboratory building. Samples were analyzed for nitrate plus nitrite, organic nitrogen, total phosphorus, organic matter (by wet digestion), and pH. The procedures were the same as reported in section B of this report.

<u>Principal Investigator</u>: David L. Correll, Radiation Biology Laboratory, Smithsonian Institution.

Research Funding: Smithsonian's Environmental Sciences Program and Program for Research Applied to National Needs of the National Science Foundation.

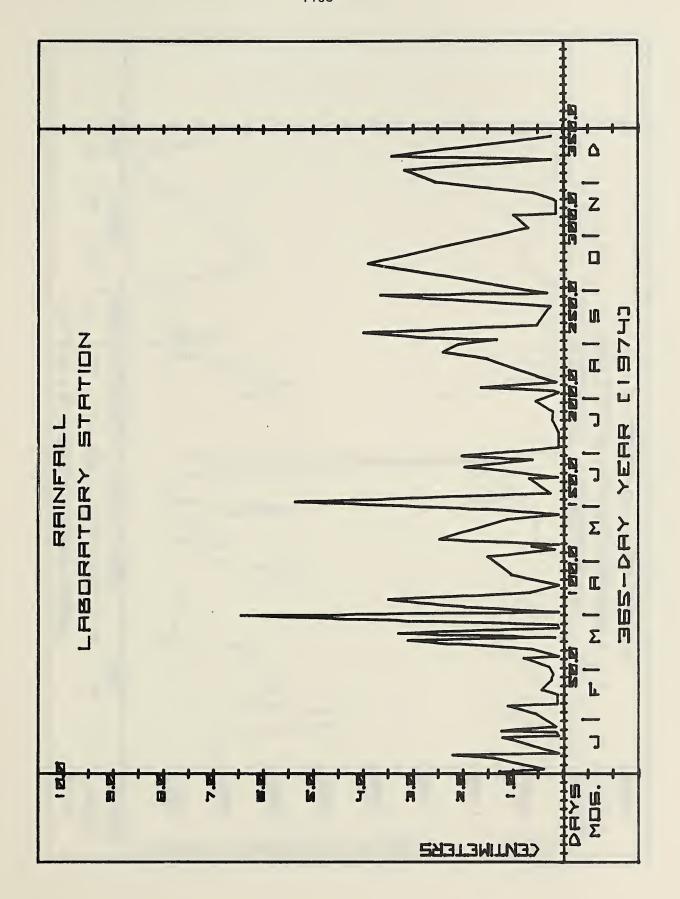
Rainfall Data (taken at laboratory station)

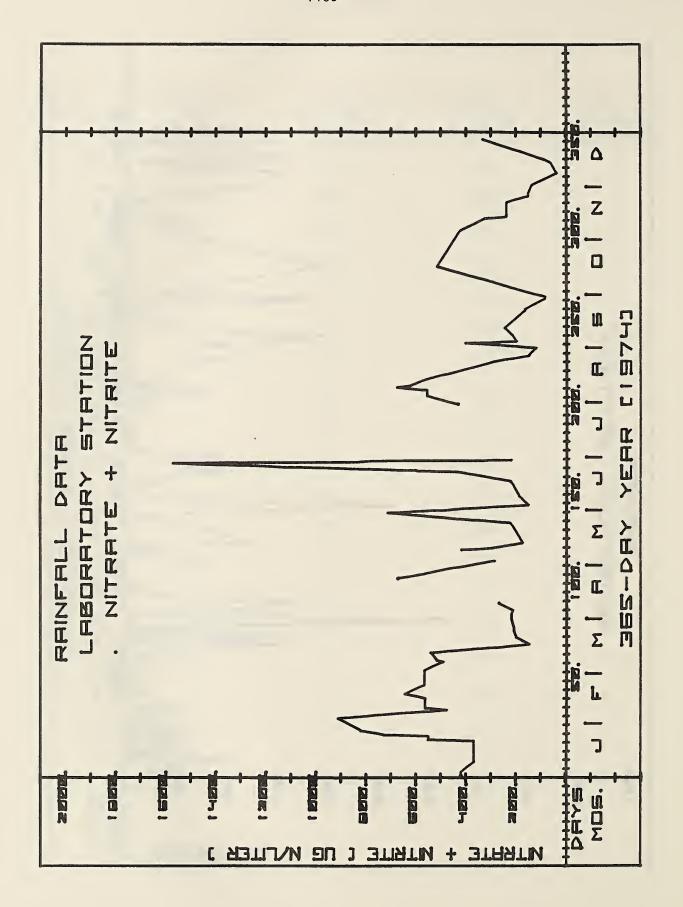
Day of 1974	Rainfall (cm)	Nitrate + Nitrite (ug N/1)	Organic Nitrogen (ug N/1)	Total Phosphorus (ug P/1)
1	1.29	423	283	7
3	0.40	423	283	7
9	1.37	369	204	9
10-11	2.21	372 <sup>c</sup>	204	24C
12	0.10	372 <sup>c</sup>	204 <sup>c</sup>	24 <sup>C</sup>
21	1.22	375	204	38
22	0.10	551°	240 <sup>c</sup>	34 <sup>c</sup>
24	0.15	551 <sup>C</sup>	240 <sup>C</sup>	34 <sup>C</sup>
25	1.24	727	276	29
27	0.15	819 <sup>c</sup>	545 <sup>C</sup>	44 <sup>C</sup>
34	0.53	911	814	58
38-39	1.11	478	414	106
40	0.13	561 <sup>c</sup>	302c	71 <sup>c</sup>
45	, 0.10	561 <sup>C</sup>	302 <sup>C</sup>	71 <sup>c</sup>
47-48	0.43	644	189	36
53	0.25	568 <sup>c</sup>	473 <sup>c</sup>	45 <sup>C</sup>
56	0.20	568 <sup>C</sup>	473 <sup>C</sup>	45 <sup>C</sup>
61	0.30	568 <sup>C</sup>	473 <sup>C</sup>	45 <sup>C</sup>
65-66	0.79	492	756	45 <sup>C</sup>
67	0.10	517	774	45 <sup>C</sup>
71	0.61	541	792	53

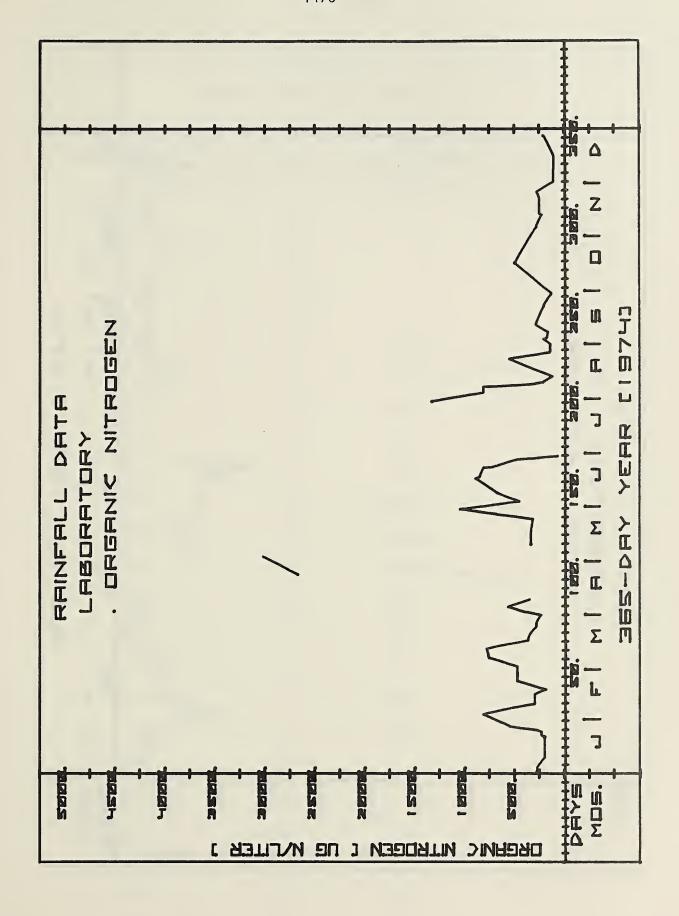
Day of 1974	Rainfall (cm)	Nitrate + Nitrite (ug N/1)	Organic Nitrogen (ug N/1)	Total Phosphorus (ug P/1)
75-76	3.11	148	371	16
78	0.18	174 <sup>c</sup>	353 <sup>C</sup>	11 <sup>c</sup>
80	3.30	200	334	5
83	0.10	211 <sup>C</sup>	284 <sup>c</sup>	8c
85	0.13	211 <sup>C</sup>	284 <sup>c</sup>	8c
88-90	6.46	223	233	11
92	0.10	217 <sup>C</sup>	400 <sup>C</sup>	21 <sup>C</sup>
95	1.98	211	567	31
98-99	3.50	268	356	18
103	0.68	-	-	-
107	0.10	-	-	-
113	1.04	670	2675	400
123	1.52	289	3017	290
126	0.55	-	-	-
127	0.18	-	-	-
129	0.63	417	-	63
130	0.10	2 <b>9</b> 6 <sup>C</sup>	342 <sup>c</sup>	76 <sup>C</sup>
132-133	2.48	175	342	88
143-144	1.14	223	313	47
147	0.10	468 <sup>C</sup>	680 <sup>C</sup>	63 <sup>C</sup>
150	1.49	712	1047	79
152-154	5.37	152	458	87
159	0.27	187 <sup>C</sup>	675 <sup>C</sup>	84 <sup>C</sup>

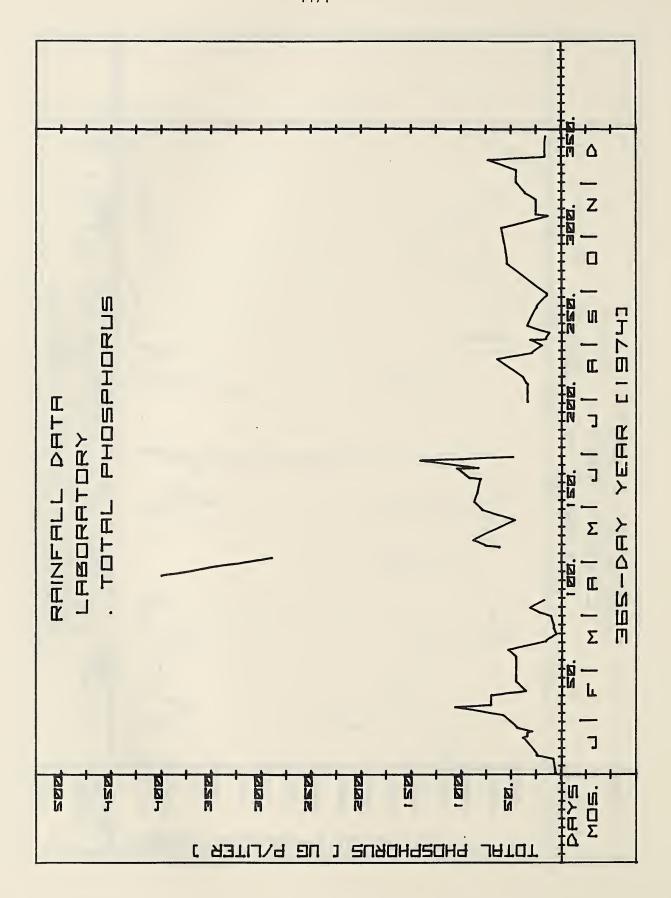
Day of 1974	Rainfall (cm)	Nitrate + Nitrite (ug N/1)	Organic Nitrogen (ug N/1)	Total Phosphorus (ug P/1)
167	0.68	222	891	30
168	0.12	220 <sup>c</sup>	849 <sup>C</sup>	92 <sup>C</sup>
173	1.65	439	807	104
174	1.98	596	720	84
178	0.63	1571	487	141
179-180	2.03	221	73	49
185	0.10	-	-	-
193	0.10	-	-	-
200	0.22	-	-	-
205	0.20	-	-	-
211	0.55	433	1330	34
216	0.10	554 <sup>c</sup>	818 <sup>c</sup>	34 <sup>c</sup>
217	0.20	554 <sup>c</sup>	818 <sup>c</sup>	34 <sup>c</sup>
219	1.65	554 <sup>c</sup>	818 <sup>c</sup>	34 <sup>c</sup>
221	0.68	675	305	33
222	0.15	622 <sup>C</sup>	215 <sup>C</sup>	36 <sup>C</sup>
225	0.50	568	124	39
235	1.52	299	553	64
239	2.41	150	153	30
243	2.13	121	138	20
246	1.34	402	211	31
247	2.76	201	174	16

Day of 1974	Rainfall (cm)	Nitrate + Nitrite (ug N/1)	Organic Nitrogen (ug N/1)	Total Phosphorus (ug P/1)
249-250	4.00	216	158	12
254	0.53	246	284	34
264	0.27	166 <sup>c</sup>	211 <sup>c</sup>	25 <sup>C</sup>
265	0.27	166 <sup>c</sup>	211 <sup>c</sup>	25 <sup>C</sup>
271	3.66	85	138	15
272	0.33	85	138	15
289	3.90	513	494	54
309	0.70	423	284	61
316	0.99	326	225	14
317	0.15	240	255	25
324	0.15	240	255	25
325	0.20	240	255	25
329	0.58	153	284	36
335	2.56	136	116	45
342	3.17	39	102	46
348	0.25	65	109	73
350	3.43	91	116	17
361	0.25	332	211	15









Rainfall Data (taken at laboratory station)

Day of 1974	рН	Organic Matter (ug/1)
65	6.5	-
75	5.1	-"
80	5.1	-
90	4.9	-
95	4.9	12.2
98	4.7	10.5
113	6.1	42.8
123	6.1	66.6
132	6.1	49.6
143	6.1	59.8
149	4.2	62.6
152	4.6	25.2
167	3.6	59.2
172	4.1	54.7
174	3.7	33.7
177	3.8	42.2
179	4.5	10.9
211	4.5	-
220	3.9	-
225	5.2	-
234	5.2	23.1
238	4.7	30.9
242	5.2	18.7

Rainfall Data (taken at laboratory station)

Day of 1974	рН	Organic Matter (ug/l
245	4.3	21.8
246	4.2	9.2
249	4.0	9.2
254	-	36.4
271	5.1	18.0
289	4.7	25.1
309	5.4	-

